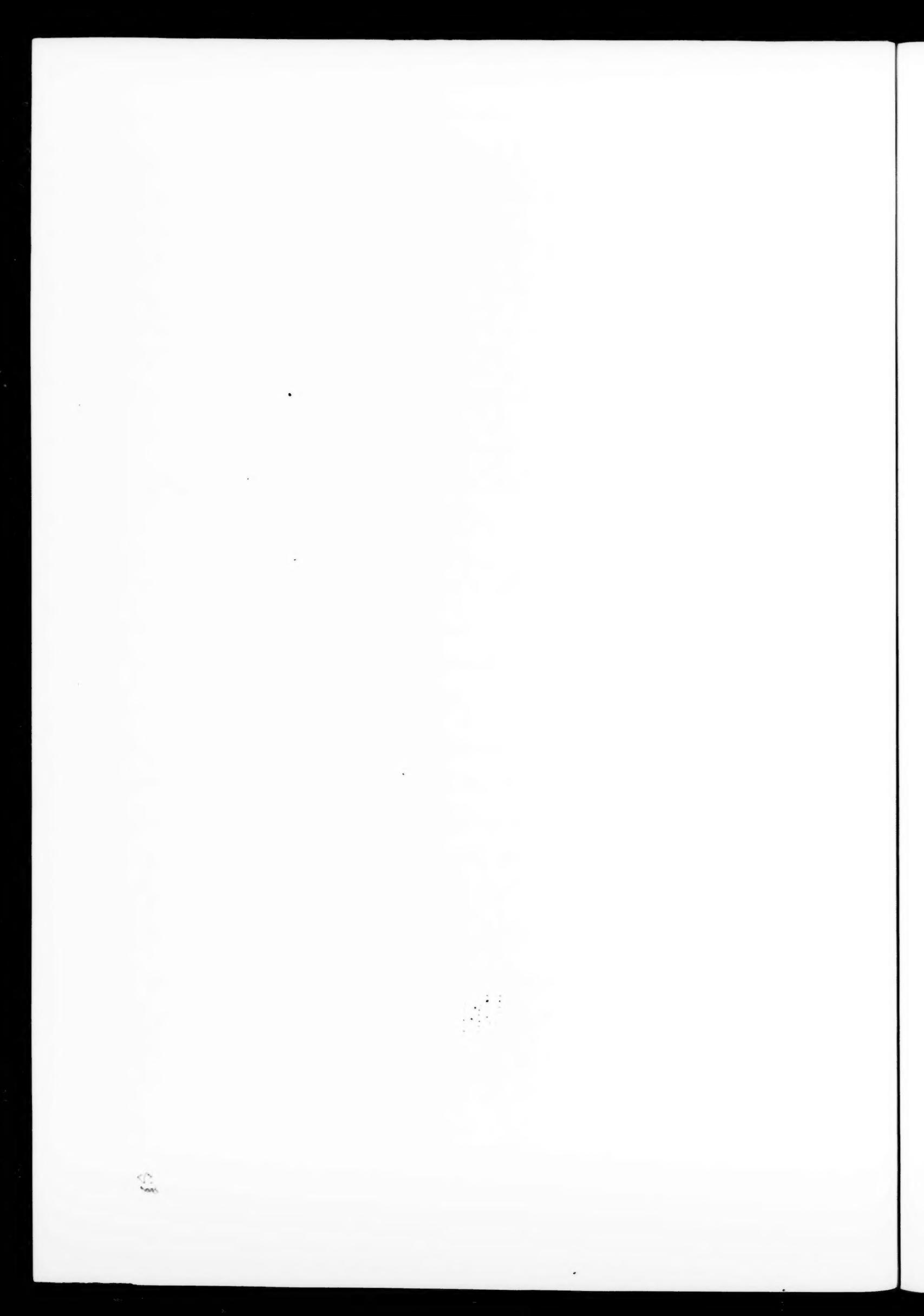


L Aug 1

MACHINERY

Index to Volume 46
September 1939—August 1940

1940
THE INDUSTRIAL PRESS
140-148 Lafayette St.
New York



Index to MACHINERY, Volume 46

A		
Abart Gear & Machine Co.:		
Speed Reducer	July 226	
Abbott, George L., Personal of	Nov. 234	
Abe, P. A., Personal of	Apr. 198	
Aber Engineering Works:		
Cherrying Attachment for Milling Machine	Aug. 142	
"Abrasaw" Cut-off Machine, Bridgeport	Dec. 286	
Abrasives-belt Grinding Machine, Porter-Cable. Apr. 183		
Abrasive Dressing Tool Co.:		
Diamond Wheel-dressing Tool	Aug. 142	
Abrasive Engineering Corporation:		
Portable Grade-O-Meter for Determining Correct Grade of Grinding Wheels	Apr. 187	
Abrasives-Wheel Cutting-off Machine, American. Feb. 144		
Accidents are Costly to Workers and to Industry. Eye	Oct. 160-F	
Accidents Caused by Unsafe Practices Found in Our Shops. Arthur K. Baker	Feb. 115	
Accumulator with Air Ballast, Hydraulic. Oct. 160-D		
Acetylene Association:		
Meeting to be Held in Milwaukee	Apr. 163	
Acetylene Equipment May be Dangerous, Home-made	Sept. 41	
Acetylene Generator, Portable	Sept. 59	
Acheson-Colloids Corporation:		
The Lubrication of Rubber Parts	Sept. 26	
Metal Parts Impregnated with Graphite to Reduce Abrasion	Mar. 139	
Wire with Surface Impregnated by Dry Lubricant	Aug. 129	
Acme Machine Tool Co.:		
Heavy-duty Turret Lathes	Oct. 77	
Acme Machinery Co.:		
Roll-threading Machine and Forging Machine Latest Practice in Forging Shells	Oct. Mar. 122	
Actuator, Micro Switch	Jan. 190	
Adapters for Automatic Screw Machines, Brown & Sharpe Feeding Finger	Feb. 146	
Adhesive for Joining Metals, High-strength Water-proof	Apr. 171	
Adjustment for Ball Bearings, Dumore Preload "Adjusto-Spede" Alternating-current Motor	Apr. Dec. 294	
Advertising Helps to Increase Employment. How Aero-Thread—A New Method of Making Threaded Connections	Apr. June 158	
AGA Metal Tube Co.:		
Galloyed Steel Tubing Meets Varied Requirements	Jan. 174	
Galloyed Steel Tubing Meets Varied Requirements	Jan. 174	
Ahlberg Bearing Co.:		
Simplex Ball-bearing Units for Machine Applications	Feb. 148	
Ainesworth, Bertram M., Personal of	Feb. 154	
Air, An Industrial Application of Electrically Cleaned. W. J. Loach	Aug. 89	
Air-conditioning, Drafting Department Efficiency Improved by	Oct. 160-K	
Air-control Systems, Manufacturing Heaters for Chrysler Corporation. Charles O. Herb	Apr. 152	
Air Corps in National Defense, The Role of the Army. Major General Henry H. Arnold	July 130	
Air Cylinder, see Cylinder "Air Master," Purifier Attachment for Grinding Machines	Jan. 185	
Air Reduction Sales Co. "Airc" Planograph Equipped with Two Metal-cutting Gas Torches	Dec. 281	
Aircraft Assembly Workers, Vocational Course to Train	Sept.	
Aircraft Engine Industry, Machine Tools in the J. Carlton Ward, Jr.	Oct.	
Aircraft Industry, Clamping Tools Developed for Use in	Apr.	
Aircraft Industry Holds the Spotlight, America's	July 129	
Aircraft Industry, Ingersoll-Rand Air Tools for July 228		
Aircraft Metal School Opened in California. Mar. 131		
Aircraft Parts, Presses for Forming Metal. July 132		
Aircraft Plant, Grinding Master Connecting-rods in an Italian	May 109	
Aircraft Screw Products, Inc.:		
The Aero-Thread—A New Method of Making Threaded Connections	June 125	
Airplane, Douglas Builds the World's Largest. George A. Strompl	July 146	
Airplane-engine Castings, Nickel-alloy Iron Used for	June 144	
Airplane Engine, see Engine. Airplane Factory, Automation in a French	July 182	
Airplane Parts, Dies of Alloy Iron Form	May 130	
Airplane Plant, Sheet-metal Operations in an Dec. 240		
Airplane Propellers, Outstanding Methods Produce Hamilton Standard. Arvid Nelson	July 158	
Airplanes, Boeing Specializes on Four-engine. Charles O. Herb	July 158	
Airplanes by Real Production Methods, Military	July 178	
Airplanes for Commerce and Defense, Lockheed Builds. J. H. Sreenan	July 140	
Airplanes, Vultee Methods Speed Production of Fighting. Harold M. Harrison	July 170	
Ajax Electric Co., Inc.:		
Electric Heating of Large Nitrate Baths for Heat-treatment	Apr. 182	
Ajax Flexible Coupling Co.:		
Forged-steel Flexible Couplings	June 165	
Ajax Mig. Co.:		
Continuous Cold-drawing and Straightening Machines	Oct. 116	
Huge Forging Machine with One-piece Frame May 137		
Albanene—a New Type of Tracing Paper	Oct. 106	
Albright Equipment Co.:		
"Hydra" Stainless-steel Valve	July 216	
Alden, John W., Personal of	Aug. 154	
Alexander, Arthur H., Personal of	Aug. 156	
Alexander Brothers:		
New Type of Leather Belting Made up from Links	June 118	
Aligning Device, Adjustable Shaft	June 135	
"All Purpose" Toolpost Grinder	Sept. 61	
Allegheny Ludlum Steel Corporation:		
Pluramelt—A New Steel Making Process. Mar. 123		
Allis Steel Corporation:		
Ludlum Bord—Stainless-steel "Lumber" for the Construction Field	Apr. 171	
Allen-Bradley Co.:		
Three-button Control Station	Dec. 287	
Allen, Edwin W., Obituary of	Feb. 158	
Allen, Omer L., Personal of	Jan. 197	
Allen, Russell M., Personal of	May 158	
Allis-Chalmers Mfg. Co.:		
Fifty-four Men Honored by Company	Nov. 205	
Weld-O-Tron Low-current Electronic Arc Welder Nov. 232		
Machining Revolving Element of Large Centrifugal Pump	Feb. 105	
Pyramid-mounted Motor-generator Sets	Feb. 140	
Motor Coils Insulated with Woven Glass Tape Mar. 139		
Testing the Alignment of a Combined Generator and Water-wheel Shaft in a Huge Lathe. May 100		
Huge Runner for Hydraulic Turbines for Boulder Dam	Aug. 101	
Allis Co., Louis:		
"Adjusto-Spede" Alternating-current Motor	Dec. 294	
Allison Engineering Co.:		
Airplane Engines Built in a Shop as Modern as Flight Itself	July 164	
Alloy Used in Work-holding Devices, Low Melting Point	Mar. 92	
Alsimag 222—A Ceramic Material Available in Bar, Tube, and Flat Form	Feb. 133	
Aluminum Co. of America:		
Aluminum Research Laboratories Install Huge Testing Machine	Apr. 162	
Aluminum Research Laboratories Install Huge Testing Machine	Apr. 162	
Aluminum Sheet, Nickel and Chromium Bonded to	Mar. 138	
Aluminum Wheels Now Being Used on Trucks and Buses	May 131	
American Broach & Machine Co.:		
Working Model of Regular Three-way Broaching Machine	Sept. 41	
Hydraulic Broaching Machines	Oct. 94	
Dual-rail Surface Broaching Machine	Nov. 221	
"Gearbroacher" Equipped to Produce Four Hundred Starter Gears an Hour	Aug. 122	
American Electric Fusion Corporation:		
Spot-welders of Standardized Design	Aug. 135	
American Foundry Equipment Co.:		
Combination Wheelabrator "Tumblast-Tablast" Metal-cleaning Equipment	Aug. 136	
American Gas Association:		
Industrial Gas Conference in Toledo	Apr. 202	
American Gas Furnace Co.:		
Reciprocating Clean Hardening Machine	May 142	
American Gear Manufacturers' Association:		
Better Business in 1939	Sept. 35	
Semi-annual Meeting to be Held at Whitecomb Sulphur Springs	Oct. 155	
Gear Manufacturers Discuss the Problems of Their Industry	Nov. 193	
Twenty-fourth Annual Meeting Held in Ashville	June 139	
American Instrument Co.:		
Oscillograph for Testing Vibration-absorption Properties of Rubber	Sept. 55	
Improved "Magne-Gage" for Measuring Metallic and Non-metallic Coatings	Jan. 193	
Abrasive-wheel Cutting-off Machine	Feb. 144	
American Lava Corporation:		
Alsimag 222—A Ceramic Material Available in Bar, Tube, and Flat Form	Feb. 133	
American Nickeloid Co.:		
Nickel and Chromium Bonded to Aluminum Sheet	Mar. 138	
Pre-finished Aluminum Sheets with Bonded Nickel or Chromium Coatings	June 145	
American Optical Co.:		
Eye Accidents are Costly to Workers and to Industry	Oct. 160-F	
American Saw Mill Machinery Co.:		
Multi-speed Wood-turning Lathes	Nov. 222	
Uni-Point Radial Saw for Pattern and Woodworking Shops	Mar. 146	
American Screw Co.:		
Advertising Award Made to Company	Nov. 173	
American Society for Metals:		
Twenty-first Annual National Metal Exposition	Oct. 149	
National Metal Exposition to be Held in Cleveland	May 150, Aug. 124	
American Society of Mechanical Engineers:		
Engineers Celebrate Centennial of Birth of Robert Henry Thurston	Sept. 12	
Warren H. McBryde Elected President of Society	Nov. 167	
Sixtieth Annual Meeting Held in Philadelphia	Jan. 176	
Proposed Standard for Engineering and Scientific Graphs	Apr. 169	
Sixtieth Anniversary of Society	May 109	
Spring Meeting to be Held in Worcester	May 143	
American Society of Tool Engineers:		
Semi-annual Meeting to be Held in Cleveland	Oct. 155	
Tool Engineers Meet in Cleveland	Nov. 195	
Elmira Chapter Meeting	Dec. 298	
Coming Annual Meeting of Tool Engineers	Mar. 102	
Annual Meeting Held in New York	Apr. 167	
Greater New York Chapter Formed	June 143	
Semi-annual Meeting to be Held in Cincinnati	Aug. 150	
American Standards Association:		
Standards for Pipe and Tubing	Sept. 39	
Standard Approved for Involute Splines	Mar. 94	
Ammo Small-bore Hole, and Boring Machine	Jan. 193	
Ammunition and Instruments at Frankford Arsenal, Manufacturing Small-arms. Colonel Edwin D. Bricker	Jan. 154	
Ammunition, Picatinny Advances the Art of Making. Colonel Edward M. Shinkle:		
2	Nov. 172	
Analyzer for Determining Smoothness of Finished Surfaces, Brush Surface	Apr. 180	
Anchors, E. H., Personal of	July 234	
An-cor-loc Division, Laminated Shim Co., Inc.:		
Self-contained All-metal Lock-nut	Aug. 148	
Anderson, E. K., Personal of	Apr. 196	
Anderson, William W., Personal of	May 154	
Angevin, Ferris M., Personal of	May 156	
Angle-head for Close-corner Drilling. Stow	Aug. 145	
Angle-iron, Universal "Magne-Blox"	Aug. 148	
"Ang-Lites" for Industrial Use	July 228	
Angular Holes, Indexing Fixture for Drilling. Joseph Waitkus	Sept. 29	
Ankeney, H. E., Personal of	Nov. 234	
Annealing Wire Reduces Costs and Increases Output, Radically New Method of	Dec. 272	
Apprentices, see also Training, Education, School, Vocational.		
Apprenticeships Fully Recognized in Europe, Value of	Sept. 36	
Arbor for Facing Flanges of Cast-iron Fittings, Centering. Martin H. Ball	Aug. 117	
Arbor Hall New Type	Oct. 147	
Arc Welding, see Welding.		
"Arcmaster" Welder, Bear Alternating-current	July 226	
Armour Plate, Hanchett Traveling-wheel Grinding Machine for Grinding Edges of	Aug. 184	
Armstrong Bros. Tool Co.:		
Miniature Reversible Ratchet Wrench	Feb. 147	
Armstrong, T. N., Personal of	Dec. 298	
Arnold, Major General Henry H.:		
The Role of the Army Air Corps in National Defense	July 130	
Arsenal, Modern Shop Equipment in the Rock Island, Colonel Norman S. Ramsey	Dec. 235	
Arsenals, Spending Millions to Re-equip Army. Brigadier General Charles T. Harris, Jr.	Oct. 84	
Arter Grinding Machine Co.:		
Model D Rotary Surface Grinding Machine	Oct. 129	
Ashley, James L., Personal of	Dec. 297	
Assembling and Straightening Presses, Denison Hydraulic Broaching	Nov. 225	
Assembling Operation, Arbor Press with Locking Device for Vincent Waitkus	Sept. 40	
Assembly Line, Under Pontiac's New	Aug. 104	
Associated Machine Tool Dealers of America:		
Annual Convention Held in Cleveland	Nov. 205	
Spring Convention Held in Atlantic City	June 139	
Atkins & Co., E. C.:		
Curled-clip System of Metal Cutting	Aug. 141	
Atlantic Abrasive Corporation:		
Types AK, LB, and SB Grinding Wheels	May 147	
Atlas Mfg. Co.:		
Special Methods in a Jobbing Crankshaft and Camshaft Shop	Nov. 185	
"Autodraft" Portable Drawing Machine	Dec. 288	
Automatic Chucking Machine, Goss & DeLeeuw	Feb. 92	
Two-spindle	Oct. 133	
Automatic Mfg. Co., Inc.:		
Multiple Hole-piercing Machine	Dec. 291	
Automatic, National Acme 30-ton Chucking	Oct. 88	
Automatic Screw Machine, see also Screw Machine.		
Automatics and Balancing Machines, New Gisholt	Oct. 92	
Automatics in a French Airplane Factory	July 182	
Automatics, New Equipment for Brown & Sharpe	Dec. 289	
Automobile Plant, Operations in Studebaker's Modernized	Apr. 116	
Automobiles, New Production Equipment for 1940	Pontiac	Apr. 146
Automotive Maintenance Machinery Co.:		
Ammo Small-bore Hole, and Bearing Boring Machine	Jan. 193	
Automotive Parts, Recent Developments in Broaching	Feb. 92	
Automotive Progress, Tool Engineering the Basis of	Apr. 109	
Avey Drilling Machine Co.:		
New Single- and Multiple-spindle Drilling Machines	Oct. 75	
B		
Babcock & Wilcox Co.:		
Croloy—A Stainless-steel Clad Carbon-molybdenum Plate	Dec. 275	
Correction on Croloy Note	Jan. 171	
Croloy—A New Alloy for High-temperature Applications	Feb. 133	
"Baby Blue" Desk Blueprinting Machine	Jan. 191	
Baker, Arthur K.:		
Unsafe Practices that are Still Found in Our Shops	Feb. 115	
Using Microscopes to Facilitate Accurate Machine Work	Mar. 129	
Baker Bros. Inc.:		
Self-contained Drill Unit	Nov. 224	
Baker, Donald A.:		
Holding Small Punches in Punch Pad	Feb. 118	
Mending Tears in Tracing Paper	May 114	
Adjustable Tension Guides for Blanking Dies	June 134	
Relocation of Scrap Cutters Eliminates Trouble	July 203	
Baker, Ralph W., Personal of	May 156	
Baker-Raulang Co.:		
Nickel-chromium-molybdenum Steel Shafts Used on Industrial Trucks	Mar. 139	
Bakewell Mfg. Co.:		
Precision Tapping Machines	Dec. 284	
Baking Plate lustre Reproduces Metal Colorings on Polished Parts	Sept. 43	
Balancer, "Super Safety"	Oct. 160-D	
Balancing Equipment, G-E Portable Dynamic	Dec. 290	
Balancing Machines, New Gisholt Automatics and	Oct. 92	
Baldor Electric Co.:		
Improved Carbide Tool Grinder	Feb. 144	
Ball-bearing Grinders	Aug. 145	
Baldwin-Southward Division of the Baldwin Locomotive Works:		
Testing Machine at the World's Fair	Oct. 160	
Multi-purpose Presses	June 154	
Baling Press, H-P-M Scrap Metal	Dec. 282	
Ball-bearing Installation Pays for Itself in One Month	Oct. 155	
Ball-bearing Oil Circulating System	June 164	
Ball-bearing Units for Machine Applications, Simplex	Feb. 148	
Ball Bearings, Dumore Preload Adjustment for	Apr. 192	
Ball Bearings, Norma-Hoffmann Extra-light	Oct. 146	
Ball Bearings, Porous Bronze Retainers for Lubricating Fats	Dec. 283	
Ball, Frank A., Personal of	Nov. 234	
Ball, Martin H.:		
Adjustable Idler Pulleys for Right-angle Belt Drives	July 205	
Centering Arbor for Facing Flanges of Cast-iron Fittings	Aug. 117	

Banbury, F. H., Personal of	Mar. 155	Boots Self-locking Nut	May 149
Band Saw, see Saw.		Borer, Combination Vertical Milling Machine and Jig	June 161
Banks, William Y., Obituary of	Jan. 204	Bores Hardened by New Electric Method, Inside of Cylinders and	Dec. 296
Banthin, K. N.: Shop-fabricated Wheel-puller	Feb. 121	Boring and Drilling Machine, Root Hydraulic Oct. 141	
Barber-Colman Co.: Vertical Hobbing Machine	Oct. 106	Boring and Reaming Machine, LeMaire Two-way Horizontal Drilling	Apr. 190
Gear-head Motors	Feb. 146	Boring, Drilling, and Milling Machines, Giddings & Lewis Horizontal	Oct. 69
Automatic Hob's opening Machine	Apr. 175	Boring, Drilling, and Milling Machines, Lucas New Model Large Size Horizontal	Oct. 89
Bard, O. L., Personal of	June 169	Boring Fixture Designed to Accommodate Three Different Parts, F. Server	Aug. 115
Barnes, William W., Personal of	Aug. 156	Boring Machine, Amoco Bearing	Jan. 193
Barr, William A., Personal of	Mar. 155	Boring Machine and Die-sinking Machines, Jackson High-speed Vertical	Feb. 139
Bartek, John S., Personal of	Oct. 160-K	Boring Machine, Jig, see Jig.	
Bartlett, C. O., Personal of	Aug. 154	Boring Machine, Moline	Aug. 137
Bartlett, Hayward Division of Koppers Co.: Multiple "Oil-Wedge" Sleeve Bearing	June 142	Boring Machine, Moline Precision	Jan. 186
Base Provided with Spring Tension, Motor	Oct. 136	Boring Machine with Power Rapid Traverse, Cleereman Jig	July 217
Bassoff, A. B.: Variable-stroke Cam-actuated Mechanism	July 196	Boring Machines, Redesigned Ex-Cell-O Precision	Jan. 184
High-speed Intermittent Gearing	Aug. 103	Boring Mill, Cincinnati "Hypro" Vertical	Oct. 83
Bates, H. O.: Adjustable Gold-stamping Machine	July 219	Boring Mill for Cutting Teeth in Large Gear Segments, Fixture Used on Joseph Waitkus	July 197
Bath, Simply Constructed Electric Heating	Apr. 157	Borup, John J., Personal of	July 232
R. W. Wyman		Boston Gear Works, Inc.: Straight-in-line "Ratiomotor" Speed Reducer	Sept. 58
Baths for Heat-treatment, Electric Heating of Large Nitrate	Apr. 182	Bowen, Rear Admiral H. G.: Selling Machine Tools to the U. S. Navy	Oct. 108
Bauer, William R., Personal of	Apr. 198	Box-tool Fixture for Machining Conical Point	Dec. 265
Baumbach Mfg. Co., E. A.: Universal Oilier for Die-set Leader Pins	Nov. 222	R. A. Dressler	Sept. 64-A
Beach Air Brush Co., Willard C.: Improved Spray Gun Made of Dowmetal	Jan. 200	Roye III, F. W., Personal of	June 174
Beam, Austin Fox, Obituary of	May 158	Roynie, C. B., Personal of	
Bear Mfg. Co.: Alternating-current "Arcmaster" Welder	July 226	Brad Foote Gear Works: Compact Speed Reducer	May 146
Bearing, Multiple "Oil-Wedge" Sleeve	June 142	Bradford Machine Tool Co.: Lathes of Improved Design	Oct. 217
Bearing, see Ball, Roller, Babbitt, etc.		Brake-drum Superfinishing Machine, Foster	Sept. 49
Bearing Units, Corrosion-resistant Fafnir	Jan. 183	Brake, Press, see Press.	
Bearings, New Series Timken	Aug. 139	Brass Channels to Rectangular Shape, Bending	Sept. 31
Bearings with New Mechanical Seal, Fafnir	Nov. 230	Braun Gear Corporation: Certified Alloy Cast-iron Gears Now Available	
Bearings with Retainers, Small Size Precision Ball	Apr. 190	Braun, H. J., Personal of	May 130
Becker, Max F., Personal of	July 232	Brazing Alloy Used on Heavy Current Conductors, Low-temperature Silver	Mar. 139
Bedard & Morency Mill Co.: Porce-Tite—A New Paint that is Waterproof	Mar. 138	Brazing, Fixture for Holding Carbide Tools while S. M. White	May 117
Beds Designed for Maximum Strength and Rigidity, Lathe	Nov. 170	Belt Drives, Adjustable Idler Pulleys for Right-angle, Martin H. Ball	July 205
Beggs, J. S.: Drawing Isometric Circles	Jan. 172	Belt Grinder for Laboratory Use, Fisher	Nov. 228
Belt Slip Worth Talking About? Is. W. F. Schaphorst	Feb. 121	Belt Slip Worth Talking About? Is. W. F. Schaphorst	Mar. 115
Belts to Be Cleaned with Steam? Should, W. F. Schaphorst	Mar. 115	Belts, Hewitt All-neoprene Transmission	Sept. 49
Belts, Horsepower Capacity of Sloping and Vertical, W. F. Schaphorst	May 119	Beltng, "Fabco" Power	Aug. 134
Beltng Made up from Links, New Type of Leather	June 118	Beltng, Synthetic Coating Protects Conveyor	Apr. 171
Beltng, Weight of, W. F. Schaphorst	Feb. 122	Benders for Tubing, Hand	Aug. 147
Bending Brass Channels to Rectangular Shape	Sept. 31	Bending Presses, Steelweld	Mar. 147
Bending Presses with Bed and Ram Extensions, Steelweld	June 157	Bending Presses with Bed and Ram Extensions, Steelweld	Mar. 147
Bending Roll for Small Angles and Shapes, Buffalo	Oct. 125	Bending Roll for Small Angles and Shapes, Buffalo	Oct. 125
Berkert, Louis M., Personal of	May 151	Bennett, Charles L., Personal of	Feb. 152
Bergman Mechanical Engineering Co., Inc.: Bench Type Internal Grinding Machine	Oct. 137	Bench Type Internal Grinding Machine, Oct. Tap-relieving Attachment for Utility Grinders	Dec. 292
Berriman, J. W., Personal of	Mar. 158	Berry, New Air-hardening Tool and Die Steel	Mar. 136
Beryllium-copper Springs Made to Meet Precision Requirements	Sept. 43	Betz, William C.: Threading Tool Grinding Block	Jan. 169
Beryllium Improve Copper Characteristics, How Minute Amounts of	Mar. 138	Biggs, Percy H., Obituary of	May 158
Bethlehem Steel Co.: New Air-hardening Tool and Die Steel	Mar. 136	Biur Lubricating Corporation: Hydraulically Operated Lubricators	Feb. 145
Betz, William C.: Threaded Tool Grinding Block	Jan. 169	Billingdale, J. S., Personal of	July 236
Biggs, Percy H., Obituary of	May 158	Black & Decker Mfg. Co.: Electric Drill of Improved Design	Sept. 50
Biur Lubricating Corporation: Hydraulically Operated Lubricators	Feb. 145	High-speed "Tappun"	Aug. 147
Billock, William W., Personal of	Mar. 152	Blades, Fansteel Centerless Grinder	Mar. 152
Blake Co., Edward: J-B Tap Grinder	June 158	Blake Co., Edward: J-B Tap Grinder	June 158
Bliss Co., E. W.: All-steel Press Brake	Oct. 112	Bliss, J. S., Personal of	July 236
Presses of Enclosed Design	Nov. 217	Bliss, J. S., Personal of	July 236
Changing from Welded to Cast Frame Construction in Press Design	Jan. 159	Bliss, J. S., Personal of	July 236
High-production Press with Inclinable Mounting	Jan. 184	Boeing Aircraft Co.: Boeing Specializes on Four-engine Planes	July 158
Cast-Venus Welded Press Construction	May 95	Boeing Co., Henry P.: Hydro-Dynamic Press for Redrawing Cartridge Cases	July 216
Heavy-duty Trimming Press	May 136	Press Brake Equipped to Handle Wide Range of Work	Aug. 140
Hydro-Dynamic Press for Redrawing Cartridge Cases	July 216	Block, L. E., Personal of	Aug. 140
Blue Paste for Locating High Spots when Scraping Bearing Surfaces	May 149	Bloomberg, William W., Personal of	Feb. 152
Blueprint Machine, Paramount Streamline	Nov. 230	Blowpipe and Cutting Attachment, Welding	Aug. 184
Blueprinting Machine, Vandewood Desk Type	Jan. 191	Blowpipe Designed for Light Welding, Oxweid	Feb. 162
Boats, Consolidated in the Biggest Builder of Flying, Charles O. Herb	July 188	Blue Paste for Locating High Spots when Scraping Bearing Surfaces	May 149
Boeing Aircraft Co.: Boeing Specializes on Four-engine Planes	July 158	Boeing Specializes on Four-engine Planes	July 158
Boggs & Co., Henry P.: Hyco Tap-grinder	July 215	Bonus Payment to Discharged Employees, Leo T. Parker	Mar. 115
Book on Machine Shop Training, New	May 129	Book on Patents, New	Nov. 208
Book on Patents, New	Nov. 151	Booth, Henry, Personal of	May 151
Booth, J. B.: Tripping Mechanism Operated by Revolving Shaft	Sept. 21	Booth, J. B.: Quick-loading Chucks or Arbors	Sept. 30
Boots Self-locking Nut	May 149	Boots Self-locking Nut	May 149
Borer, Combination Vertical Milling Machine and Jig	June 161	Borer, Combination Vertical Milling Machine and Jig	June 161
Bores Hardened by New Electric Method, Inside of Cylinders and	Dec. 296	Bore Hardened by New Electric Method	Dec. 296
Boring and Drilling Machine, Root Hydraulic	Oct. 141	Boring and Drilling Machine, Root Hydraulic	Oct. 141
Boring, Drilling, and Milling Machines, Giddings & Lewis Horizontal	Oct. 69	Boring, Drilling, and Milling Machines, Giddings & Lewis Horizontal	Oct. 69
Boring, Drilling, and Milling Machines, Lucas New Model Large Size Horizontal	Oct. 89	Boring, Drilling, and Milling Machines, Lucas New Model Large Size Horizontal	Oct. 89
Boring Fixture Designed to Accommodate Three Different Parts, F. Server	Aug. 115	Boring Fixture Designed to Accommodate Three Different Parts, F. Server	Aug. 115
Boring Machine, Amoco Bearing	Jan. 193	Boring Machine, Amoco Bearing	Jan. 193
Boring Machine and Die-sinking Machines, Jackson High-speed Vertical	Feb. 139	Boring Machine and Die-sinking Machines, Jackson High-speed Vertical	Feb. 139
Boring Machine, Jig, see Jig.		Boring Machine, Jig, see Jig.	
Boring Machine, Moline	Aug. 137	Boring Machine, Moline Precision	Jan. 186
Boring Machine with Power Rapid Traverse, Cleereman Jig	July 217	Boring Machine with Power Rapid Traverse, Cleereman Jig	July 217
Boring Machines, Redesigned Ex-Cell-O Precision	Jan. 184	Boring Mill, Cincinnati "Hypro" Vertical	Oct. 83
Boring Mill for Cutting Teeth in Large Gear Segments, Fixture Used on Joseph Waitkus	July 197	Boring Mill, Cincinnati "Hypro" Vertical	Oct. 83
Borup, John J., Personal of	July 232	Boring Mill, Cincinnati "Hypro" Vertical	Oct. 83
Boston Gear Works, Inc.: Straight-in-line "Ratiomotor" Speed Reducer	Sept. 58	Boston Gear Works, Inc.: Straight-in-line "Ratiomotor" Speed Reducer	Sept. 58
Bowen, Rear Admiral H. G.: Selling Machine Tools to the U. S. Navy	Oct. 108	Bowen, Rear Admiral H. G.: Selling Machine Tools to the U. S. Navy	Oct. 108
Box-tool Fixture for Machining Conical Point	Dec. 265	Box-tool Fixture for Machining Conical Point	Dec. 265
R. A. Dressler	Sept. 64-A	R. A. Dressler	Sept. 64-A
Roye III, F. W., Personal of	June 174	Roye III, F. W., Personal of	June 174
S. M. White	May 117	S. M. White	May 117
Tantalum and Titanium Carbide Tools, see Carbide Tools while Brazing, Fixture for Holding	Aug. 105	Tantalum and Titanium Carbide Tools, see Carbide Tools while Brazing, Fixture for Holding	Aug. 105
Carbonyl Company, The: Reducing the Cost of Polishing	Mar. 125	Carbonyl Company, The: Reducing the Cost of Polishing	Mar. 125
Carriage Front for Landis Threading Machines, Collett Chuck	Mar. 144	Carriage Front for Landis Threading Machines, Collett Chuck	Mar. 144
Carroll, Jr., Phil, Personal of	May 134	Carroll, Jr., Phil, Personal of	May 134
Cartridge-case Finishing Machine, Coulter	Dec. 287	Cartridge-case Finishing Machine, Coulter	Dec. 287
Cartridge-case Heading Press, H-P-M Turret Type	Mar. 145	Cartridge-case Heading Press, H-P-M Turret Type	Mar. 145
Cartridge Cases, Bliss Hydro-Dynamic Press for Redrawing	July 216	Cartridge Cases, Bliss Hydro-Dynamic Press for Redrawing	July 216
Cartridge Cases, Lake Erie Long-stroke Press for Drawing	Aug. 144	Cartridge Cases, Lake Erie Long-stroke Press for Drawing	Aug. 144
Case, Colonel Rolland W.: Manufacturing Preparedness at Watertown Arsenal		Case, Colonel Rolland W.: Manufacturing Preparedness at Watertown Arsenal	
2	Mar. 99	2	Mar. 99
Cast Frame Construction in Press Design, Changing from Welded to E. V. Crane	Jan. 159	Cast Frame Construction in Press Design, Changing from Welded to E. V. Crane	Jan. 159
Cast Gear Blanks Introduced by Ford, Centrifugally	Mar. 130	Cast Gear Blanks Introduced by Ford, Centrifugally	Mar. 130
Cast Gear Blanks Introduced by Ford, Centrifugally, Charles O. Herb	May 85	Cast Gear Blanks Introduced by Ford, Centrifugally, Charles O. Herb	May 85
Cast-to-form Dies and Punches Made from Meehanite	Apr. 170	Cast-to-form Dies and Punches Made from Meehanite	Apr. 170
Cast Versus Welded Press Construction, I. Patrick	May 95	Cast Versus Welded Press Construction, I. Patrick	May 95
Castings, How New Plymouth Washers Clean Engine	Apr. 142	Castings, How New Plymouth Washers Clean Engine	Apr. 142
Castings, New Method for Finishing	Dec. 242	Castings, New Method for Finishing	Dec. 242
Castings, Silver-bearing Stainless Steels Available in the Form of	July 207	Castings, Silver-bearing Stainless Steels Available in the Form of	July 207
Cemented Carbide, see Carbide.		Cemented Carbide, see Carbide.	
Census of Manufactures for 1939	Dec. 266	Census of Manufactures for 1939	Dec. 266
Census of the Machinery Industries	Feb. 109	Census of the Machinery Industries	Feb. 109
Census, The Sixteenth Decennial	Apr. 194	Census, The Sixteenth Decennial	Apr. 194
Center with Interchangeable Inserts, Live	Apr. 183	Center with Interchangeable Inserts, Live	Apr. 183
Centering Arbor for Facing Flanges of Cast-iron Fittings, Martin H. Ball	Aug. 117	Centering Arbor for Facing Flanges of Cast-iron Fittings, Martin H. Ball	Aug. 117
Centering Machine, LeMaire Shell	Jan. 189	Centering Machine, LeMaire Shell	Jan. 189
Centrifugally Cast Gear Blanks Introduced by Ford, Charles O. Herb	May 85	Centrifugally Cast Gear Blanks Introduced by Ford, Charles O. Herb	May 85
Flat Form—Alsimag 222	Feb. 133	Flat Form—Alsimag 222	Feb. 133
Cerromatrix Used in Work-holding Devices	Mar. 92	Cerromatrix Used in Work-holding Devices	Mar. 92
Certified Alloy Cast-Iron Gears Now Available	May 130	Certified Alloy Cast-Iron Gears Now Available	May 130
Chaffee, W. J.: Skill of Arc-welding Operators	Aug. 121	Chaffee, W. J.: Skill of Arc-welding Operators	Aug. 121
Chain Detacher for Steel Link-belt	Feb. 149	Chain Detacher for Steel Link-belt	Feb. 149
Chain, Morse Channel-lubricated Roller	Nov. 232	Chain, Morse Channel-lubricated Roller	Nov. 232
Chain Vise, Whitney Universal	Oct. 144	Chain Vise, Whitney Universal	Oct. 144
Challenge Machinery Co.: Surface-plate Equipment	Mar. 153	Challenge Machinery Co.: Surface-plate Equipment	Mar. 153
Chamberlain, H. J.: Using Die-grinder on Lathe Faceplate for Planetary Grinding Job	May 117	Chamberlain, H. J.: Using Die-grinder on Lathe Faceplate for Planetary Grinding Job	May 117
Chambersburg Engineering Co.: Steam Drop-hammer of 20,000-pound Capacity	Jan. 187	Chambersburg Engineering Co.: Steam Drop-hammer of 20,000-pound Capacity	Jan. 187
Motor-driven Pneumatic Forging Hammer	Mar. 150	Motor-driven Pneumatic Forging Hammer	Mar. 150
Double-geared Trimming Press	June 154	Double-geared Trimming Press	June 154
Chamfering and Contour Burring Machines, Cimatoil Gear-tooth	Oct. 113	Chamfering and Contour Burring Machines, Cimatoil Gear-tooth	Oct. 113
Chandler, Archie, Personal of	May 156	Chandler, Archie, Personal of	May 156
Change-gears for Helical-gear Hobbing, Russell H. Stout	Mar. 134	Change-gears for Helical-gear Hobbing, Russell H. Stout	Mar. 134
Charlton, Edward J., Personal of	May 156	Charlton, Edward J., Personal of	May 156
Chase Brass & Copper Co.: Tellurium Coppers Having Unusual Combination of Properties	Feb. 132	Chase Brass & Copper Co.: Tellurium Coppers Having Unusual Combination of Properties	Feb. 132
Chaser-Holders for J & L Tangent Die-head, New	Sept. 60	Chaser-Holders for J & L Tangent Die-head, New	Sept. 60
Checker for Compression Springs	Dec. 294	Checker for Compression Springs	Dec. 294
Checking up of Cutting Oils, Periodic, W. F. Schaphorst	Mar. 124	Checking up of Cutting Oils, Periodic, W. F. Schaphorst	Mar. 124
Cherrying Attachment for Milling Machine	Aug. 142	Cherrying Attachment for Milling Machine	Aug. 142
Chesterman 40-inch Height Gage	Feb. 143	Chesterman 40-inch Height Gage	Feb. 143
Chevrolet Connecting-rods Made by Ultra-modern Methods, Charles O. Herb	Apr. 122	Chevrolet Connecting-rods Made by Ultra-modern Methods, Charles O. Herb	Apr. 122
Chevrolet Plant, Machining Automobile Flywheels at the, Charles O. Herb	June 103	Chevrolet Plant, Machining Automobile Flywheels at the, Charles O. Herb	June 103
Chicago Crankless Steel Press Brake	Dec. 286	Chicago Crankless Steel Press Brake	Dec. 286
Chicago Pneumatic Tool Co.: "Super Safety" Balancer	Oct. 160-D	Chicago Pneumatic Tool Co.: "Super Safety" Balancer	Oct. 160-D

Universal Electric Drill	Jan. 193	Coatings, Improved "Magne-Gage" for Measuring Metallic and Non-metallic	Jan. 193	Correction—Stainless-steel Clad Carbon-molybdenum Plate for High-temperature Service	Jan. 171
Reversible Pneumatic Wrenches	Apr. 192	Cocker, Thomas E., Personal of	May 158	Cory, Charles R.:	
Chicago Rivet & Machine Co.:		Die Design and Construction:		Die Design and Construction:	
Automatic Rivet-setter	Oct. 147	"Colaweld Mormal" Used in Coating Metals	July 207	13 Sept. 6	
Movable Rivet-setter with Solenoid-operated	Oct. 160-F	Collar Designed for Lengthwise Adjustment, Mandrel Thrust	E. Waterman Aug. 112	Hemming Dies for Folding over Edge of Metal to Form Reinforcement	May 98
Movable Anvil	Oct. 160-F	Collet Indexing Fixtures, Hardinge	June 163	Forming Die Operated by Inside and Outside Cams	May 115
Chicago Tool & Engineering Co.:		Collet, Spring Pin for Holding Scrap Stock in Screw Machine	A. C. Zeamer Dec. 262	Cosgrove, J. M., Personal of	Mar. 160
Palmgren Quick-change Safety Drill Chuck	Oct. 147	Collinson, H. W., Personal of	Feb. 154	Cartridge-case Finishing Machine	Dec. 287
Production Vise for Milling, Drilling, and Grinding Operations	Nov. 225	Colonial Alloys Co.:		Semi-automatic Hob Thread-milling Machine	Apr. 177
Christie, Alexander G., Personal of	Nov. 234-A	"Strang-Hold" Adhesive for Joining Metals		Counter for Machine Controls, Microflex Reset	Nov. 228
Chrome-nickel-molybdenum Steels of High Tensile Strength, Machining	A. J. Snyder July 208	Colaweld Atomic-welding Liquid, Paste, and Rod	May 131	Coupling, Lord Bonded Rubber Flexible	Dec. 295
Chromium Bonded to Aluminum Sheet, Nickel and	Mar. 138	"Colaweld Mormal" Used in Coating Metals	July 207	Coupling, Lovejoy Heavy-duty Flexible	June 152
Chromium-Molybdenum Alloy Steel for Superheater and Steam-valve Parts	July 207	Collar Designed for Lengthwise Adjustment, Mandrel Thrust	E. Waterman Aug. 112	Couplings, Ajax Forged-steel Flexible	June 165
"Chronoflex" Automatic Timer	May 149	Collet Indexing Fixtures, Hardinge	June 163	Course, Time Study	Apr. 194
Chrysler Corporation Air-control Systems, Manufacturing Heaters for Charles O. Herb	Apr. 152	Collet, Spring Pin for Holding Scrap Stock in Screw Machine	A. C. Zeamer Dec. 262	Courses for Home Study, Engineering	152
Chuck Carriage Front for Landis Threading Machines, Collet	Mar. 144	Collinson, H. W., Personal of	Feb. 154	Covel-Hanchett Co.:	
Chuck, Erickson Precision Collet	Nov. 149	Colonial Broach Co.:		Precision Saw-sharpening Machine	June 154
Chuck for Triple Gear	J. R. Whittles May 116	Pull-down Broaching Machine	Sept. 50	Covel Mfg. Co.:	
Chuck, Indexing Collet, Joe R. Cowles Sept. 28	Broaching Inside Diameter of Large Ring Gears	Nov. 168	Radius Grinding Attachment	Nov. 220	
Chuck, Palmgren Quick-change Safety Drill	Oct. 147	One of the Longest Single-piece Broaches Ever Made	Jan. 180	Covers, Danly Safety Guide-post	Feb. 147
Chucks, Energizer for Magnetic	Apr. 185	Broaching Spark Plugs to Improve Finish	May 89	Cowles, Joe R.:	
Chucks Equipped with Release Spring, Universal Collet	Sept. 69	Automatic Indexing and Unloading Fixture for Gear Broaching	May 127	Indexing Collet Chuck	Sept. 28
Chucks, Low Melting Point Alloy Used in Mar.	July 92	Broaching Equipment in a Buick Operation	June 143	Cowling, Colonel James G., Personal of	May 156
Chucks, "Magne-Blox" Parallels and V-blocks for Magnetic	Apr. 190	Colors for Pipes, Standardized	Jan. 196	Coyle, Roy T.:	
Chucks or Arbors, Quick-loading	Sept. 29	Columbia Vari-Speed Co.:		Quick-acting Fixture for Notch-milling	July 198
Chucks, Tocco Hardening Adopted for Jacobs Nov.	Speed Control of Improved Design	June 165	Craig, Jr., Albert P., Personal of	Mar. 160	
Chucking Machine, see also Automatic	202	Columbian Corp.:		Cramer Co., Inc., R. W.:	
Chucking Machine, Verti-Hydra-Matic	Mar. 153	Co-Ro-Felt Pad for Disk Sanders	Mar. 153	Automatic Reset Timer	Apr. 194
Church, Maynard D., Personal of	Jan. 200	Combination Machine Tools, see also Tool-room Machine		Cramp, George B.:	
Cimatool Co.:		Combination Tool-room Machine, Hannifin June 151		Welded Flange Joint of Unique Design	Nov. 188
Gear-tooth Chamfering and Contour Burring Machines	Oct. 113	Comet Products Co.:		Crane, E. V.:	
Cincinnati Bickford Tool Co.:		Portable Heavy-duty Arc Welder	May 147	Changing from Welded to Cast Frame Construction in Press Design	Jan. 159
Jig-boring Machine and Radial Drilling Machine	Oct. 87	Commerce Pattern Foundry & Machine Co.:		Crankshaft and Camshaft Shop, Special Methods in a Jobbing	Nov. 185
Cincinnati Electrical Tool Co.:		Upton Electric Salt Bath Furnace	Jan. 193	Crankshaft Lathe with Center Drive, Wickes Hydraulically Operated	Dec. 288
"Air Master" Purifier Attachment for Grinding Machines	Jan. 185	Comparator Assembled from Standard Optical Parts, Projection	July 218	Crankshafts, Fifteen Thousand Inspections per Hour on Ford	Apr. 128
Cincinnati Milling Machine and Cincinnati Grinders, Incorporated:		Comparator, Federal	May 143	Creider, William, Personal of	July 236
Producing Precision Gears in a Machine Tool Plant	Oct. 9	Comparator for Inspecting Spherical Surfaces, Jones & Lamson	Nov. 212	Crescent Machine Co.:	
New Milling Machines Developed by Company	Sept. 9	Competition, Packaging Machinery	Sept. 41	Portable Sheet-metal Cutting Machine	July 222
Recent Developments in Broaching Automotive Parts	Feb. 9	Compound, "Wonder Weld" Heat-resisting	Sept. 61	Redin Floor Type Sensitive Drilling Machine	
Hydraulic Universal Grinding Machine	Mar. 92	Conant, Earl D., Personal of	Oct. 160-J	Nov. 215	
Work-holding Fixture with Weighing Device that Indicates Amount of Stock to be Milled Off	Mar. 143	Condit, Kenneth H., Personal of	Dec. 297	Critchett, James H., Personal of	Aug. 154
Hydraulic Universal Grinding Machine—Correction	Apr. 154	Conductors, Low-temperature Silver Brazing Alloy Used on Heavy Current	Mar. 139	Croloy Clad Carbon-molybdenum Plate for High-temperature Service	Dec. 275
Dial Type Milling Machines	May 135	Cone Automatic Machine Co., Inc.:		Croloy 7—A New Alloy for High-temperature Applications	Feb. 133
Cincinnati Planer Co.:		Improved Six-spindle Conomatic Screw Machines	Oct. 77	Cross-feed for B & S Plain Grinding Machines, Automatic	Aug. 144
Hydro Vertical Boring Mill	Oct. 83	Conomatic with Hydraulic Action for Stock Feed and Attachments	Nov. 211	Cross Gear & Machine Co.:	
Hydro Planer Type Milling Machine	Dec. 279	"Cone" Worm-gear Speed Reducers	Sept. 55	Gear-tooth Pointing Machine	June 150
Cincinnati Shaper Co.:		Connecting-rod Caps, Fixture Designed for Use in Sawing Off	Edward L. Peterson June 131	Crossman, M. R., Personal of	Jan. 197
Improved Shears and Shears	Oct. 119	Connecting-rod Grinding Machine and Vertical Drilling Machine, LeMaire	Dec. 285	Crowe, John J., Personal of	May 154
Power-controlled Back-gage for "All Steel" Shear	Nov. 230	Connecting-rods for Weight and Center of Gravity, Correcting Automobile	June 168	Crystal Lake Machine Works:	
Rapid-traverse Shapers with Improved Features	Apr. 156	Connecting-rods in an Italian Aircraft Plant, Grinding Master	May 169	Universal Bench Grinding Machine	Dec. 282
Huge Press Brake Built for Aircraft Industry	May 172	Connecting-rods Made by Ultra-modern Methods, Chevrolet, Charles O. Herb	Apr. 122	Plain Grinding Machine	Feb. 146
All-steel Shear	June 189	Connections, VibraSeal Pipe and Tube	Dec. 293	Cuferco Copper-iron Alloy for Spot-welding Tips	June 145
Circles, Drawing Isometric	J. S. Beggs Jan. 174	Connectors, "Superset" Tubing	Dec. 295	Cullen-Friestadt, Co.:	
Circles, Unusual Set-up for Numbering Graduated, O. S. Marshall	June 144	Connolly, George J., Personal of	Jan. 197	Adjustable Welding Table of Three-ton Capacity	
Clabault, Wilfred A., Personal of	June 147	Conomatic with Hydraulic Action for Stock Feed and Attachments	Nov. 211	Dec. 286	
Clamp for Spot-welding Gun, Hydraulic Cable May 143	188	Consolidated Aircraft Corporation:		Sheet-steel Lifter	Mar. 149
Clamp, "Knu-Kam Klamp" Toggle Type Work-holding	Aug. 147	Biggest Builder of Flying Boats	July 188	Cummings, W. P.:	
Clamp, Knu-Vise Toggle	Feb. 143	Consolidated Machine Tool Corporation:		Building an Improvised High-speed Tapper	May 126
Clamp, Quick-acting Jig, Victor Rosenthal, June 135	183	Newton Straight-line Mill-N-Shaver	Oct. 123	Curled-Chip System of Metal Cutting, Atkins	Aug. 141
Clamp, Self-contained Packing for Hold-down, M. Jacker	Dec. 262	Contactors, Cuter-Hammer Heavy-duty Direct-current	Apr. 190	Curry, D. M., Personal of	Nov. 234-A
Clamps, Danly Kwik-Klamp Toggle	Nov. 218	Contacts Made from a Powdered Metal Composition, Electrical	July 206	Curtiss Airplane Division of Curtiss-Wright Corporation:	
Clamping Fixture for Holding Work while Grinding Center Hole, Edward L. Peterson	Nov. 189	Contest, Resistance Welding Prize	May 150	Sheet-metal Operations in an Airplane Plant	
Clamping Tools Developed for Use in Aircraft Industry	Apr. 184	Continental Machines, Inc.:		Cushion, Dayton Rogers Pneumatic Die	May 144
Clark Equipment Co.:		Doall 26-inch Throat Machine	Oct. 118	Cushion with Slug Clearance, Pneumatic Die	Nov. 228
Reporting on a Company's Business to the Employees	Sept. 37	Typical Examples of Work Handled on Contour Shaping Machines	Nov. 171	"Cut Master" Vertical Turret Lathes and Multi-Au-Matic, Bullard	Oct. 98
Clark, Harry K., Personal of	Aug. 152	Doall Grinding Machine with Interchangeable Surface and Cutter Grinding Heads	Jan. 188	Cut-off Machine, Bridgeport "Abrasaw"	Dec. 286
Clark, Jr. Electric Co., J. S.:		Doall Height and Depth Gage	May 143	Cut-off Machine, Delta Improved	Mar. 151
Portable Grinder and Utility Drill	Oct. 137	Contour Duplicating Attachment, Hydraulically Controlled	Sept. 57	Cutter Hammer, Inc.:	
Clean Shop Departments by Good-natured Chidings, Encouraging	Feb. 120	Contour Shaping Machine, Doall 26-inch Throat	Oct. 118	Heavy-duty Direct-current Contactors	Apr. 190
Cleaned Air, An Industrial Application of Electrically	W. J. Loach Aug. 89	Contour Shaping Machines, Typical Examples of Work Handled on	Nov. 171	Cutter, Earl B., Personal of	Sept. 63
Cleaner for Electroplating, "Electrex"	Sept. 39	Contract? What is a Bailment Sales	Leo T. Parker May 119	Cutter Grinder, K. O. Lee Reamer and	Dec. 290
Cleaning and Starting Electric Motors After an Extended Shut-down	Oct. 160-H	Contracts, Union Responsibility for	Leo T. Parker Feb. 122	Cutter Grinder, Radius-forming Attachment for John W. Gerdel	July 198
Cleaning Equipment, Combination Wheelerator "Tumblast-Tablast" Metal	Aug. 136	Control, Electromagnetic Feeler-gage	1	Cutter Grinding Machine, LeBlond Lathes and	
Cleaning Machine Corporation:		Control for Arc Welder, Wilson Remote	Aug. 119	Cutter Grinding Machine, Oliver Tool and	Oct. 117
Crownless Presses	Sept. 51	Control, Link-Belt Variable-speed Transmission with Vernier	Aug. 148	Cutter Grinding Machine with Anti-friction Table, Norton Tool and	Nov. 214
Hydraulic Presses Introduced in a Variety of Types	Oct. 68	Control Maintains Constant Cutting Speed when Facing Disks, Automatic Variable-speed, Francis A. Westbrook	Mar. 110	Cutters Eliminates Trouble, Relocation of Scrap, Donald A. Baker	July 203
Five Hundred-ton Hydraulic Press	Aug. 133	Control of Improved Design, Columbia Vari-Speed	June 165	Cutters, McCrosky Kennametal-tipped Blade Milling	Jan. 189
Cleerman Machine Tool Co.:		Control, Preventing Overloading of Press Motor by Suitable	Sept. 21	Cutting Compound, Oil, see Compound, Oil	
Jig Boring Machine and Sliding Head Drilling Machine	Oct. 70	Control Station, Allen-Bradley Three-button	Dec. 287	Cutting Equipment of Improved Design, Prest-O Weld Welding and	Nov. 212
Jig Boring Machines with Power Rapid Traverse	July 217	Controller, Bristol Electronic Pyrometer	July 224	Cutting Flame, see Flame	
Cleveland Tramrail Division of Cleveland Crane & Engineering Co.:		Conway Clutch Co.:		Cutting Machine, Crescent Portable Sheet-metal	
Full-rotation Box Grab and Tramrail Carrier	May 148	Control for Arc Welder, Wilson Remote	May 148	July 222	
Tilting Box Grab and Tramrail Carrier	Aug. 145	Control, Link-Belt Variable-speed Transmission with Vernier	Aug. 156	Cutting Machine, Linde Oxy-acetylene	Nov. 221
Climax Molybdenum Co.:		Control, Precision Die Sets		Cutting Machine, Portable Oxy-acetylene	Oct. 143
Molybdenum Steels for High-speed Locomotive Service	July 230	Kwik Klamp Toggle Clamps		Cutting Machine, Walker-Turner Radial	June 158
Clingsan, R. E., Obituary of	Apr. 202	Safety Guide-post Covers		Cutting Machines, Racine Metal	Oct. 71
Clutch, Dawes Automatic Centrifugal	Oct. 113	Cutting-off Machine, American Abrasive-wheel	Feb. 144	Cutting-off Tool for Use with a Hexagon Turret, I. E. Yeoman	Jan. 165
Clutch Designed to Eliminate Shock, Mercury May Clutch for Heavy-duty Work, Simplified Air-cooled Clutch Mechanism, Automatic Selective	Apr. 148	Conforming		Cylinder or Bore Gage, Federal Self-locating	Sept. 61
Protective	Nov. 181	Control, Disk Clutches with Overload Release	Dec. 287	Cylinders for Punch Presses, Pneumatic Counter-balancing	Feb. 143
Clutches, Twin Disc Machine Tool	Oct. 145	Cook, T. E., Personal of	Aug. 156	Dabney, John C., Personal of	Nov. 234-A
Clutches with Overload Release, Conway Disk	Dec. 287	Coombs, Fred W. Obituary of	Sept. 64-A	Dalzell, R. Carson, Personal of	Oct. 160-K
Coating for Metal Products, Metasal 494-A	Jan. 175	Copper Characteristics, How Minute Amounts of Beryllium Improve	Mar. 138	Danly Machine Specialties, Inc.:	
Coating Protects Conveyor Belting, Synthetic	July 207	Copper-iron Alloy for Spot-welding Tips, New	June 145	Precision Die Sets	Sept. 56
Coating Protects Conveyor Belting, Synthetic	Apr. 171	Coppers Having Unusual Combination of Properties, Tellurium	Feb. 132	Kwik Klamp Toggle Clamps	Nov. 218
		Corey, James W., Personal of	May 156	Safety Guide-post Covers	Feb. 147
		Co-Ro-Felt Pad for Disk Sanders	Mar. 153	Davies, Clarence E., Personal of	May 151
		"Corox" Heaters for Tempering Baths, Westinghouse	Apr. 192	Dawes Equipment, Inc.:	
		Correction—Cincinnati Hydraulic Universal Grinding Machine	Apr. 194	Automatic Centrifugal Clutch	Oct. 113
		Correction—Roper Pumps	Apr. 194	Dayton Rogers Mfg. Co.:	
				Pneumatic Die Cushion with Slug Clearance	Nov. 228
				Pneumatic Counterbalancing Cylinders for Punch Presses	Feb. 143
				Telescoping Pneumatic Die Cushion	May 144

Deale, Robert C.: The Heat treatment of Tool Steels:	Sept. 33
1	Sept. 33
2	Dec. 257
Defense Committee of the Machine Tool Industry	July 228
Defense Program, Industry Holds the Key Position in the	July 194
Defense Program, Lessons of the Last War Need to be Emphasized in Present	Aug. 102
Defense, The Role of the Army Air Corps in National, Major General Henry H. Arnold	July 130
deHoll, Henry R., Personal of	Sept. 63
Delaney, Thomas C., Personal of	Mar. 158
Delivered, When a Purchaser Refuses to Pay for Machinery that has been, Leo T. Parker	July 204
Delta Mfg. Co.: Shaper for Forming Moldings	Dec. 292
Improved Cut-off Machine	Mar. 151
Demagnetizer for "Superpower" Chucks, Taft-Peirce	Oct. 135
Demco Sensitive Drilling Machine	Apr. 179
Denson Engineering Co.: Hydraulic Broaching, Assembling, and Straightening Presses	Nov. 225
Hydraulic Straightening and Forging Press	Mar. 150
Knee Type Hydraulic Press	Aug. 138
Desmond Stephan Mfg. Co.: Simplex Vises for Welding and Production Operations	Sept. 59
Despatch Oven Co.: Tempering and Drawing Furnace	May 139
De Sta Co Clamping Tools Developed for Use in Aircraft Industry	Apr. 184
Detacher for Steel Link-Belt, Chain	Feb. 149
Detroit Power Screwdriver Co.: Power Screwdriver with Magazine Feed	May 140
Detroit Stamping Co.: Clamping Tools Developed for Use in Aircraft Industry	Apr. 184
Detroit Surfacing Machine Co.: Portable Electric Sanding Machine	June 162
Detroit Testing Machine Co.: Hydraulically Operated Brinell Testing Machine for Large Castings and Forgings	Sept. 53
Detroit Universal Duplicator Co.: Improved Duplicator for Die and Mold Production	Apr. 186
Contour Milling with Automatic Duplicator Control	June 167
Double, Norman L., Personal of	June 174
de Von, Jr., J. L., Personal of	July 232
Diagnostic Ultra-Lite Co.: "Ang-Lites" for Industrial Use	July 228
Dial Indicator, see Indicator.	
Dickey, Roger C.: Fixture for Use in Milling Beveled Work	Mar. 111
Die, see also Drawing, Punch, Threading.	
Die and Mold Production, Improved Duplicator for	Apr. 186
Die-cast Parts, Fastenings for	Aug. 125
Die-casting Machine, Phoenix-Lester	Feb. 138
Die-casting Machines and Plastic Tablet Pre-forming Machine Kux-Lohner	Jan. 187
Die-casting Machines, G & M	May 141
Die-casting Machines, Phoenix-Lester	July 218
Die-casting, Protect-O-Metal, a Compound for Use in Welding and	Dec. 274
Die-castings by Inserts, Increasing the Utility of	May 110
Die-castings, Spinning Fixture for Assembling	Nov. 190
H. B. Faught	
Die Cushion, Dayton Rogers Pneumatic	May 144
Die Cushion with Slug Clearance, Pneumatic	Nov. 228
Die Design and Construction, Charles R. Cory:	13
Die Design for Inclinable Presses, Joseph I. Karash:	
1	May 106
2	June 126
Die, Experimental Press and, Vincent Waitkus	June 129
Die for Forming Spacing Tubes from Flat Blanks, M. J. Goldstein	Dec. 262
Die for Producing Clamp for Spot-light Lamp, M. J. Goldstein	May 118
Die-grinders, Rotor	Aug. 148
Die-head Chasers, Simplified Practice Recommendation	Jan. 153
Die-head for Small-diameter Threads, Geometric Solid Adjustable	Nov. 222
Die-solid, New Chaser-holders for J & L Tangent	Sept. 60
Die-heads, Jones & Lamson	Sept. 53
Die Operated by Inside and Outside Cams, Forming, Charles R. Cory	May 115
Die-section Shapes, Jessop Rolled Composite	Sept. 62
Die-set Leader Pins, Universal Oiler for	Nov. 222
Die Sets, Danly Precision	Sept. 56
Die Sets, Danly Safety Guide-post Covers for	Feb. 147
Die Shop, Ford Operates the World's Largest Tool and	Aug. 108
Die-sinking Machine, Reed-Prentice Back-gearied Vertical Milling and	Apr. 183
Die-sinking Machines Jackson High-speed Vertical Boring Machine and	Feb. 136
Die Steel, New Air-hardening Tool and	Mar. 139
Die Steel with High Wear Resistance and Minimum Distortion	June 137
Die Three-stage Piercing and Forming, George Wilson	Aug. 113
Die, Universal Self-aligning Two-hole Piercing, Walter Wells	Mar. 113
Die with a Special Stripping Device, Piercing, John J. McHenry	Jan. 167
Die with Push-through Punch for Experimental and Semi-production Work, Blanking, Walter Wells	Nov. 191
Dies, Adjustable Tension Guides for Blanking, Donald A. Baker	June 134
Dies and Punches Made from Meehanite, Cast-to-form	Apr. 170
Dies for Drawing and Forming Deep Tapered Shells, M. J. Goldstein	Mar. 95
Dies for Folding over Edge of Metal to Form Reinforcement, Hemming, Charles R. Cory	May 98
Dies for Producing Radiator Inlet Pipe with Angular Flange, Horace R. Wentzell	Feb. 119
Dies for Producing Tapered Tubes from Sheet Brass, M. J. Goldstein	Dec. 265
Dies for Two Different Shells, Using One Set of, M. J. Goldstein	June 115
Dies of Alloy Iron Form Airplane Parts	May 130
Dies, Saving \$2400 in Rebuilding	Dec. 261
Dies, the "Ekko" Process for Making Iron	Oct. 156
Dies Used in Making a Spot-light Lamp, M. J. Goldstein	Feb. 112
Dies, Whistler Universal Perforating	Sept. 60
Dicing Machine and Stock Straightener, Henry & Wright 25-ton	Oct. 134
Dieendorf, Mary A., Obituary of	Mar. 162
Diesel-engine Parts, Combined Helical and Straight Broaching of	May 122
Dietzinger Co., Eugene: "Autodraft" Portable Drawing Machine	Dec. 288
Dilatometer, Rockwell-Bristol	Apr. 186
Dillon, Robert E., Personal of	Jan. 197
Display Board with Models of Cutting Tools, General Electric	Aug. 124
Divine Brothers Co.: Polishing and Buffing Lathes	June 153
Douall Co.: Grinding Machine with Interchangeable Surface and Cutter Grinding Heads	Jan. 188
Douall Contour Shaping Machines, Typical Examples of Work Handled on	Nov. 171
Douall Height and Depth Gage	May 143
Douall 26-inch Throat Machine	Oct. 118
Dope, Toolmakers' Lay-out	Aug. 149
Doty Co., Melvin F.: "S & H" Soft Hammers	Apr. 192
Doty, F. L., Personal of	May 158
"Double-Duty" Threading and Turning Tools	June 161
Douglas Aircraft Co.: The World's Largest Airplane	July 146
Dow Chemical Co.: "Dowflake" Calcium-chloride Brine for Quenching Carbon Steel	Sept. 26
"Dowflake" Calcium-chloride Brine for Quenching Carbon Steel	Sept. 26
Dowmetal, Improved Spray Gun Made of	Jan. 200
Drafting Machine, "Wrightograph"	Nov. 223
Drafting Machine, "Wrightograph" Adjustable	Aug. 149
Drafting Tables, Hamilton	July 219
Drafting Tables, "Metapost"	July 222
Draffo Co.: Portable Drawing Machines	Aug. 143
Dravo, M. Stewart, Obituary of	Apr. 202
Drawing a Long Line, Simple Method of	Paul Gratzinski
Drawing and Straightening Machines, Ajax Continuous Cold	Jan. 169
Drawing Ellipses of Various Sizes, Using Sewing Machine Needles in	E. G. Seastrom
Drawing Isometric Circles, J. S. Beggs	Jan. 172
Drawing Machine, "Autodraft" Portable	Dec. 288
Drawing Machines, Draffo	Aug. 143
Drawing Stand, "Esoo"	Sept. 55
Drawings, Attachment for Binder that Applies Tape to Edges of	Sept. 50
Drayton, C. O., Personal of	Feb. 152
Dreis & Krump Mfg. Co.: Chicago Crankless Steel Press Brake	Dec. 286
Dresser for Contour Grinder, Stanley Diamond Wheel	Dec. 294
Dressing Tool, Diamond Wheel	Aug. 142
Drill Chuck, see Chuck	
Drill Grinder, Sterling Motor-driven	July 224
Drill Holder, Lathe Tail-saddle and Center, William S. Rowell	Aug. 118
Drill Jig, see Jig	
Drill of Streamline Design, Utility	Mar. 153
Drill Sharpening Machine, Pratt & Whitney Deep-hole	July 215
Drill Unit, Baked Self-contained	Nov. 224
Drill, Universal Electric	193
Drills, Clark Portable Grinder and Utility	Oct. 137
Drills of Improved Design, Black & Decker Electric	Sept. 50
Drills, Quick Method of Applying Large Shank to Small	Apr. 169
Drilling Angular Holes, Indexing Fixture for	Joseph Waitkus
Joseph Waitkus	Sept. 29
Drilling, Boring, and Milling Machines, Lucas New Model Large Size Horizontal	Oct. 189
Drilling, Boring, and Reaming Machine, LeMaire Two-way Horizontal	Apr. 190
Drilling Head for Small Drill Presses, Two-spindle Adjustable	Dec. 291
Drilling Machine, Cincinnati-Bickford Jig-boring Machine and Radial	Oct. 87
Drilling Machine, Cleereman Jig Boring Machine and Sliding Head	Oct. 70
Drilling Machine, Demco Sensitive	Apr. 179
Drilling Machine, "High Speed" Super-sensitive	Sept. 57
Drilling Machine, Kent Duplex Horizontal	May 140
Drilling Machine, LeMaire Connecting-rod Grinding Machine and Vertical	Dec. 285
Drilling Machine, Redin Floor Type Sensitive	Nov. 215
Drilling Machine, Root Hydraulic Boring and	Oct. 141
Drilling Machines, Avey	Oct. 75
Drilling Machines, Buffalo Motor-spindle and Vari-Drive	Oct. 125
Drilling Machines, Fosdick Radial and Sensitive	Oct. 80
Drilling Machines, Leland-Gifford	Oct. 124
Drilling, Milling, and Boring Machines, Giddings & Lewis Horizontal	Oct. 69
Drilling, Stow Angle-head for Close-corner	Aug. 145
Drive-All Mfg. Co.: Drive Unit for Motorizing Machine Tools	Sept. 54
Drive for Planer, G-E Variable-voltage	Dec. 283
Drive, Heimroth Four-speed Gear	Aug. 146
Drive, Ideal Coil Winder	Feb. 145
Drive, Producing Oldsmobile's Sensational, Charles O. Herb	Apr. 110
Drive Unit for Motorizing Machine Tools	Sept. 54
Drive Unit, High-capacity Variable-speed	Sept. 57
Drives, Adjustable Idler Pulleys for Right-angle Belt	Martin H. Ball
Drives, "Modern" Ball-bearing Motor	July 205
Drop-hammer, Chambersburg 20,000-pound Steam	June 162
Drop-hammer in the United States, Largest Steam	Jan. 187
duMont, W. Beltran, Personal of	Dec. 261
Dumore Co.: Thread-grinding Attachment	Oct. 144
Double-reduction Geared Motor Unit	Nov. 224
Mounted-wheel Shank Support	Mar. 148
Preload Adjustment for Ball Bearings	Apr. 192
Dunn, Gano, Personal of	Nov. 234-A
Duplicating Attachment, C. O. Herb	Sept. 63
Hydraulically Controlled Contour Duplicating Attachment	Sept. 57
Hydraulically Controlled Contour Duplicating Attachment	Sept. 57
Duplicator Control, Production Contour Milling with Automatic	June 167
Duplicator for Die and Mold Production, Improved	Apr. 186
Duplicator Mounted on Reed-Prentice Machine	May 150
du Pont de Nemours & Co., Inc., E. I.: Neoprene Garments for Industrial Workers	Jan. 180
A New Molybdenum-nickel Electropolating Process	Aug. 101
Solid Plastic Block Replaces Several Indicator Parts	Aug. 129
"Durabond" Process for Bonding Rubber and Neoprene to Steel	June 144
Durco Steel Used for Pumps Handling Corrosive Liquids	Sept. 43
Durex Plastics & Chemicals, Inc.: New High-impact Plastic with Unusually Smooth Finish	July 207
Durinox Steel Used for Pumps Handling Corrosive Liquids	Sept. 43
Duriron Co.: Stainless Steels Used for Pumps Handling Corrosive Liquids	Sept. 43
Duro Metal Products Co.: Tension-measuring Wrenches	June 159
Duro-Test Corporation: Modern Industrial Plant Lighting	Mar. 132
"Durrol Hewprene" Transmission Belts	Sept. 49
Dykem Co.: Blue Paste for Locating High Spots when Scraping Bearing Surfaces	May 149
Dynematic Balancing Machine, New Gisholt Automatics and	Oct. 92
E	
Eagle Signal Corporation: Microflex Reset Counter for Machine Controls	Nov. 228
"Chronoflex" Reset Timing Relay with Cycle Progress Indicator	May 149
"Flexopulse" Repeating Cycle Timer	July 226
Eastern Machine Screw Corporation: New Type of Threading Machine	Oct. 142
"Easy-Flo" Silver Brazing Alloy Used in Applying Large Shanks to Small Drills	Apr. 169
Ebrey, Dr. Glenn O., Personal of	Oct. 160-K
Eccentric Fixture for Grinding, J. R. Whittles	June 129
Education, see also Apprentices, Training, School Vocational	
Educational Program for Machine Operators, Warner & Swasey Inaugurates	June 141
Eisler Engineering Co.: Universal Spot-welding Machine	May 137
"Ekko" Process for Making Iron Dies	Oct. 156
Elastic Stop Nut Corporation: Nine New Types of Nuts	Jan. 191
"Electrex" Cleaner for Electroplating	Sept. 39
Electric Eye Discovers Pin-holes in Steel Strip	July 193
Electric Eye Inspects Thin Sheet Metal for Defects	Nov. 177
Electric Eye, see also Photo-electric Tube	
Electric Furnace, see Furnace	
Electric Heating Bath, Simply Constructed, R. W. Wyman	Apr. 157
Electric Heating of Large Nitrate Baths for Heat-treatment	Apr. 182
Electric Service Supplies Co., Metal Products Division:	
Esco Portable Tool Stand	Jan. 192
Electric Welding, see Welding	
Electrical Contacts Made from Powdered Metal Composition	July 206
Electro Lift, Inc.: Light-weight Corrosion-resisting Electric Hoist	Feb. 149
Electrode, Lincoln "Fleetweld 10"	Sept. 52
Electrode, Lincoln Stainless-steel	Mar. 145
Electrode Tips, Proper Maintenance of Spot-Welding	Mar. 102
Electrodes, Lincoln Hard-facing	Apr. 187
Electroforming Process for Making Molds and Dies	Oct. 156
Electromagnetic Feeler-gage Control	1
Electronic Indicator for Use in Making Accurate Measurements, R. G. Minarik	Aug. 119
Measurements	Mar. 133
Electroplating Process, A New Molybdenum-nickel	Aug. 101
Elgin Tool Works: Bench Lathe and Bench Lathe Unit	June 152
Eliot, Douglas F. G., Personal of	Jan. 197
Ellipses of Various Sizes, Using Sewing Machine Needles in Drawing, E. G. Seastrom	July 203
Elmes Engineering Works, Charles F.: Hydraulic Accumulator with Air Ballast	Oct. 160-D
Hydraulic Metal Marking Press	Jan. 193
Open-side Hydraulic Press	Apr. 178
Elpro Portable Printer	May 148
Embossing Press, Minster	Jan. 183
Employee Over Forty; Once More, the	Mar. 96
Employees, Reporting on a Company's Business to the	Sept. 37
Employer, There is an Important Job for the Smaller Industrial	Mar. 108
Employment, How Advertising Helps to Increase	Apr. 158
Employment is Made Possible, Three Ways by which	Nov. 178
Employment Requires Increased Capital Investments, Increased	Feb. 106
Employment, Stabilization of Manufacturing and	May 125
Enamel Brings Color to Plain Plastics, New	Aug. 128
Enamel that Reproduces Metal Colorings on Polished Parts, Baking	Sept. 43
End-mill Grinding Attachments, Brown & Sharpe	Aug. 139
Energizer for Magnetic Chucks	Apr. 185
Engine Building, Pratt & Whitney's Advanced Methods of	July 174
Engines Built in a Shop as Modern as Flight Itself, Allison, Charles O. Herb	July 164
Engines, "Wright Aero" Plans for Unprecedented Production of Airplane, W. P. Brown	July 134
Engineering and Research Corporation: Hydraulic Stretching Press of 300-ton Capacity	Sept. 52
Engineering Courses for Home Study	152
Engineering, Duke University Organizes College of	Jan. 161
Engineering Sales Co.: "Esoo" Drawing Stand	Sept. 55

T-squares and Straightedges with Transparent Edges	July 207	Filing Machines, Improved File-chain for Grob	May 145	Gages Tipped with Kennametal, "Go" and "No Go"	June 166
England, see also British, Great Britain.		Filing of Work, Using Microscopes to Facilitate Accurate	Mar. 129	Gages with Special Mountings and Dial Indicators, Unusual	Sept. 27
England's Busy Shops, American Machines in:		Arthur Baker	Mar. 129	F. H. Mayhew	Sept. 27
1	Jan. 120	Findlay, David, Personal of	Nov. 234	Gaging, see also Inspection.	
2	Mar. 116	Finishing Castings, New Method for	Dec. 242	Gairing Tool Co.:	
Engraving and Etching Machine, Preis Combination	Jan. 189	Finishing, Future Trends in Equipment for Surface	Oct. 120	Adjustable "Micro-Nut" for Setting End-cutting Tools	224
Engraving Machines, New Master Copy Type for	Apr. 186	Firnhaber, F. A.:		Gallmeyer & Livingston Co.:	
Enthone Co.:		New Hydraulic System Developed for a Small Grinding Machine	Nov. 182	Production and Tool-room Surface Grinding Machines	Oct. 80
Pickleen—A New Material Used for Clean, Economical Acid Pickling	June 145	Firth-Sterling Steel Co.:		Gardiner, C. B.:	
"Equi-Hold" Self-adjusting Device for Machine Vise Jaws	Apr. 180	An Industrial Application of Electrically Cleaned Air	Aug. 89	Careful Analysis of Proposed Products Simplifies Interchangeable Manufacture	Jan. 162
Ergolyte Mfg. Co.:		Fisher Scientific Co.:		Gardner Machine Co.:	
Arc Welders with Panel Control	Aug. 147	Belt Grinder for Laboratory Use	Nov. 228	Precision Disk Grinding Machines	Oct. 92
Ericsson Steel Co.:		Fitch, T. S., Personal of	May 158	Garlock Packing Co.:	
Precision Collet Chuck	Nov. 232	Fittings, Developments in Welded	Aug. 99	Flange Jacks for Use in Replacing Gaskets in Flanged Pipe	Mar. 128
Erie Foundry Co.:		Fixture, see Milling, Bending, Drilling, Indexing, etc.		"Lattice-Braid" Packing	June 160
Largest Steam Drop-hammer in the United States	Dec. 261	Fixture with Weighing Device that Indicates Amount of Stock to be Milled Off, Work-holding	Mar. 154	Gaskets in Flanged Pipe, Flange Jacks for Use in Replacing	Mar. 128
"Eesco" Drawing Stand	Sept. 55	Flame-cutting Machine with Two Torches, Automatic	Mar. 124	Gasoline, British Inventor Claims to have Found a Substitute for	Sept. 17
Eesco Portable Tool Stand	Jan. 192	Flame-cutting Method, Producing Heavy Machine Members by the	Nov. 169	Gear and Gearing, see also Bevel, Helical, Spiral, Spur, Worm.	
Estox Products Co.:		George M. Gillen	Nov. 145	Gear and Pinion Grinding Machine, Gleason No. 15	Oct. 111
Metasol 494—A Protective Coating for Metal Products	Jan. 175	Flame-hardening and Hard-surfacing	June 123	Gear Blanks Introduced by Ford, Centrifugally Cast	Charles O. Herb
Etcher, Ideal Electric	Aug. 145	Flame-hardening of Gear Teeth	Oct. 160-A	May 85	
Etching Solutions for Microscopic Examination of Metals	Jan. 194	Flame-hardening of Gear Teeth, Dwight Vanderveate	Feb. 123	Gear Broaching, Automatic Indexing and Unloading Fixture for	
European Thread-grinding Practice	Dec. 255	Flanders, Ralph E.:		Gear Business Indicates Business Improvement	May 127
Ex-cell-o Corporation:		American Thread-grinding Practice	Sept. 1	Volume of	Oct. 160-O
Thread-grinding and Internal Lapping Machines		Flanagan, G. B., Personal of	Aug. 154	Gear, Chuck for Triple	J. R. Whittlesey
Grinding Spindle and Hydraulic Power Unit	Oct. 104	Flat-iron Castings, Machining and Polishing	W. H. Tangeman	May 116	
Grinding Large Odd-shaped Work on Various Types of Machine Tools	Oct. 136	"Flex-Arc" Welder, Westinghouse	Sept. 22	Gear Cutting Machine, Waltham Pinion and	Oct. 138
Redesigned Precision Boring Machines	Jan. 184	Flexible-shaft Machine, Stow Combination	Sept. 56	Gear Drive, Heimroth Four-speed	Aug. 146
Exhaust Attachment for B & S Cylindrical Grinding Machine	June 159	Flexible-shaft Machine, Stow Truck-mounted	May 145	Gear-finishing Machine for Spur and Helical Gears	
Exports of Industrial Machinery	Sept. 37	Flexible-shaft Machines, Haskins	May 144	Fellows	Sept. 47
Oct. 160-A, Dec. 254, Jan. 158, Mar. 114, Apr. 168, July 208, Aug. 90.		Flexible-shaft Machines, Stow Junior Multi-speed		Gear-finishing Machine of Wider Range, Michigan Oct. 107	
Exports to England, France, and Russia; Machine Tool	Jan. 171	"Flexopulse" Repeating Cycle Timer	July 226	Gear-finishing Machines, Michigan Two-lap	Nov. 213
Exposition, Some of the Exhibits at the National Metal	Nov. 194	Flocke, F. G., Personal of	Apr. 198	Gear Grinding and Centerless Grinding Machines, Triple Announces New Jig Boring	Oct. 132
Exposition, The Recent Cleveland Shop Equipment	Aug. 90	Floors, Tred-Seal—A New Waterproofing and Crack-filling Material for	Aug. 128	Gear Hobbing, Change-gears for Helical, Russell H. Stout	Mar. 134
Extrusion Process, The Manufacture of Shell forgings by the	May 96	Flying Boats, Consolidated is the Biggest Builder of	Charles O. Herb	Gear Materials and Their Heat-treatment	Edward J. Wellauer
Eye Accidents are Costly to Workers and to Industry	Oct. 160-F	Flywheels at the Chevrolet Plant, Machining Automobile	July 188	Gear Processing, Inc.:	
Eye Accidents, Sound Slide Film Available to Prevent Industrial	Aug. 111	Charles O. Herb	June 103	Bench Model "Incolap" for Finishing Small Gears	Aug. 143
F		Ford, Henry, Personal of	Nov. 234-A	Gear Production, Increase in	Mar. 154
F. & H. Mfg. Co.:		Repairing Huge Pump Impeller in Tool and Die Shop	Mar. 162	Apr. 163, June 141, July 203.	
"Equi-Hold" Self-adjusting Device for Machine Vise Jaws	Apr. 180	Fifteen Thousand Inspections per Hour on Ford Crankshafts	Apr. 128	Gear Segments, Fixture Used on Boring Mill for Cutting Teeth in Large	Joseph Waitkuo
"Fabco" Power Belting	Aug. 134	Centrifugally Cast Gear Blanks Introduced by Ford	May 85	Gear-shaving Machine Equipped for Crowning Gear Teeth, "Red Ring"	Sept. 53
Fabreka Products Co.:		World's Largest Tool and Die Shop	Aug. 108	Gear Shaving Machine, Heavy-duty "Red Ring"	Apr. 176
"Fabco" Power Belting	Aug. 134	Radius Forming Tools	Mar. 152	Gear Teeth by Bronze-welding, Building up Broken	May 128
FabiSteel Products, Inc.:		Forging Hammer, Chambersburg Motor-driven Pneumatic	Mar. 150	Gear Teeth, Flame-hardening of	Dwight Vanderveate
Lock-nuts Designed to Increase Thread Area in Sheet Metal	June 164	Forging Machine, Acme Roll-threading Machine and	Oct. 122	Feb. 123	
"Fast-On" Lock-nut Attaching Machine	Aug. 143	Forging Machine with One-piece Frame, Huge	May 137	Gear-tooth Chamfering and Contour Burring Machines, Cimatool	Oct. 113
Faceweld Electrodes, Lincoln	Apr. 187	Forging Shells, Latest Practice in	Charles O. Herb	Gear-tooth Pointing Machine, Cross	June 150
Facing, Hard, see Hard.		Forming Moldings, Delta Shaper for	Mar. 89	Gears, Bench Model "Incolap" for Finishing Small Gears	Aug. 143
Fafnir Bearing Co.:		Forming Tools, Forest City Radius	Dec. 292	Gears, Broaching Inside Diameter of Large Ring	Nov. 168
Ball-bearing Installation Pays for Itself in One Month	Oct. 99	Forney, R. L., Personal of	Mar. 152	Gears for Industrial Use, Westinghouse Heat-treated	Nov. 214
Bearings with New Mechanical Seal	Nov. 230	Forwick Machine Tool Co.:	Jan. 197	Gears in a Machine Tool Plant, Producing Precision	D. Strachen
Porous Bronze Retainers for Lubricating Bearings	Dec. 183	Brake-drum Superfinishing Machine	Sept. 49	Sept. 9	
Corrosion-resistant Bearing Units	Jan. 155	Improved Fastener and Screw Machine	Oct. 116	Gears Measuring Wires for Internal	June 157
Falk Corporation:		Foundry to be Built by Armour Institute, Experimental	Mar. 238	Gears, New Fellows Machines for Cutting, Hardening, and Measuring	Nov. 209
Gear Materials and Their Heat-treatment	Mar. 103	Fowler, F. H., Personal of	Jan. 196	Gears Now Available, Certified Alloy Cast-Iron	May 130
Falk, General Otto H., Obituary of	July 238	Furnace, Despatch Tempering and Drawing	May 152	Gears, Zeiss Orthotest for Checking	Oct. 142
Falk, Harold S., Personal of	Apr. 290	Furnace for Hardening Tool Steels, Westinghouse	Feb. 202	"Gearbroacher" Equipped to Produce Four Hundred Starter Gears an Hour	Aug. 122
Falk, Herman W., Personal of	Apr. 290	French Factories Use American Machine Tools, Modernized	Jan. 217	Gearing, High-speed Intermittent	A. Bassoff
Fallon, Robert, Personal of	Apr. 198	Freter, R. J., Personal of	Aug. 154	Geist, Walter, Personal of	Mar. 160
Fansteel Metallurgical Corporation:		Duplex Hand Milling Machine	Oct. 133	Geldner, A. C., Personal of	Sept. 64-A
Tantung-faced Centerless Grinder Blades	Mar. 152	Franz, J. E., Obituary of	Feb. 158	General Electric Co.:	
Tantung Brazed and Welded-tip Tools	June 163	Frederick, W. J., Personal of	Aug. 154	Surface Indicator Showing Variations in Thickness of a Millionth Inch	Sept. 16
Farrel-Birmingham Co., Inc.:		Freeman, George L., Personal of	July 232	Machining and Polishing Flat-iron Castings	Sept. 22
New Cylindrical Grinding Machine with Traveling Work-table	Feb. 138	French Airplane Factory Automatics in a	July 182	A Suggestion System that Produces Results	Sept. 35
Hydraulic Presses for Molding Plastics	May 146	French Factories Use American Machine Tools, Modernized	Jan. 217	New Process Prevents Glare from Reflected Light on Glass Surfaces	Sept. 64-D
Presses for Forming Metal Aircraft Parts	July 146	Fretter, R. J., Personal of	Aug. 154	Definite-mechanical-time Starters	Oct. 125
Huge Housing for Two-pinion Reduction Units for Ships	Aug. 129	Frew Machine Co.:	Aug. 154	Pyranol-filled Capacitors	Dec. 281
Fasmer, John J., Obituary of	Mar. 162	Duplex Hand Milling Machine	Oct. 133	Variable-voltage Drive for Planer	Dec. 283
"Fast-On" Lock-nut Attaching Machine	Aug. 143	Furnace, Despatch Tempering and Drawing	May 152	Portable Dynamic Balancing Equipment	Dec. 290
Fabric Steel	Aug. 143	Furnace for Hardening Tool Steels, Westinghouse	Feb. 202	Multiple-operator Welding Sets	Jan. 190
"Fast-On" Lock-nuts	June 164	Electric	Nov. 216	Weld Recorder	Jan. 192
Fastenings for Die-cast Parts	Aug. 125	Furnace, Leeds & Northrup Automatically Controlled Carburizing	Jan. 186	Honoring Men of Long Service	Jan. 194
Fastematic and Screw Machine, Foster Improved	Oct. 116	Furnace, Small Steel-treating and General-utility	Aug. 149	Hobbing Molds in the Plastics Department	Feb. 87
Fasttraverse and Injection Molding Presses, H-P-M	Oct. 130	Furnace, Upton Electric Salt Bath	Jan. 193	New Meter for Measuring Shaft Horsepower	Mar. 106
Faught, H. B.:		G		Permanent Magnet Lifts and Holds 4450 Times its Own Weight	Mar. 107
Spinning Fixture for Assembling Die-castings	Nov. 190	G & M Mfg. Co.:		Employees Honored for Outstanding Achievements	Mar. 129
Projection Welding Fixture for Production Work	Mar. 111	High-pressure Hydraulic Die-casting Machines	May 141	How Minute Amounts of Beryllium Improve Copper Characteristics	Mar. 138
Fay Automatic Lathe, Heavy-duty	Oct. 128	Gaertner Scientific Corporation:		Radiation Type Thermo-couple	Mar. 149
Federal Machine & Welder Co.:		Projection Comparator Assembled from Standard Optical Parts	July 218	Gage for Checking Fillet Welds	Mar. 153
Automatic Hoop Forming and Welding Machine	June 156	Optical Thread Tool Gage	Aug. 146	Photo-electric Relays Pay for Themselves in One Day	Mar. 154
Federal Press Co.:		Gage, Chesterian 40-inch Height	Feb. 143	Plugging Switch with Alnico Magnet	Apr. 178
Dial-feed Press	June 158	Gage Control, Electromagnetic Feeler	Aug. 119	Speed-variator Unit	July 222
Federal Products Corporation:		Gage, Doall Height and Depth	May 143	Marked Upturn in Business Noted	Aug. 111
Self-locating Cylinder or Bore Gage	Sept. 61	Gage, Federal Self-locating Cylinder or Bore	Sept. 61	Display Board with Models of Cutting Tools	Aug. 124
Improved Model NB-60 Comparator	May 143	Gage for Checking Fillet Welds, General Electric	Mar. 153	General Motors Corporation:	
Feed Attachments for Lathes, Jefferson Turret and Pull	June 153	Gage for Cincinnati "All Steel" Shear, Power-controlled Back-gauge	Nov. 230	Overseas Everywhere with General Motors	Jan. 134
Feed, Friction-drive Roll	Oct. 153	Gage for Measuring Metallic and Non-metallic Coatings, Improved	Jan. 193	Generator, Portable Acetylene	Sept. 59
Feeding Mechanism, Novel Intermittent	Paul Grodzinski	Gage for Screw Machine Work, Angle	Robert E. Hulse	Generator Sets, Pyramid-mounted Motor	Feb. 140
Gear-finishing Machine for Spur and Helical Gears	Sept. 47	Gage for Thread, see Thread	Aug. 167	Geometric Tool Co.:	
New Machines for Cutting, Hardening, and Measuring Gears	Nov. 209	Gages, Brown Thermometer and Pressure and Vacuum	Sept. 264	Solid Adjustable Die-head for Small-diameter Threads	Nov. 222
Fenders, Unique Practices in Producing Oldsmobile Front	Charles O. Herb	Gages, Micrometer Groove	Eric A. Reibig	Precision Threading Machines	Dec. 283
Front, Charles O. Herb	Aug. 83	Gages, Plugs, Gits Gear-case Oil	Sept. 56	Tap Developed for Deep-hole Tapping	Apr. 169
"Fiberglas"-insulated Motor Much Smaller than Standard Type	Dec. 274	Gage, Thread, see Thread		Double-spindle Threading Machine	June 159
Files and Rasps, Simplified Practice for	May 128	Gages, Brown Thermometer and Pressure and Vacuum	Sept. 58	Gerdel, John W.:	
Filing Machine, Grob Band Sawing and Chain Oct. 140		Gages, For Any Size Angle, Taft-Pierce Universal Angle	Oct. 135	Grinding Spherical Shapes in a Lathe	Dec. 263
		Gages, Pratt & Whitney "Pilot" Cylindrical Plug	Aug. 141	Radius-forming Attachment for Cutter Grinder	July 198
				"Gibsiloy" Electrical Contacts	July 206

Gibson, A. E.: Cast Frame Versus Welded Construction in Press Design—A Comment	Mar. 130	Grinding Machine and Improved Cylindrical Grinding Machines. Norton "Multipurpose"	Jan. 181	Hampton Electric Tool Co.: Alternating-current Welder	Nov. 230
Gibson, Alexander, Obituary of	May 160	Grinding Machine and Vertical Drilling Machine, LeMaire Connecting-rod	Dec. 285	Hanchett Mfg. Co.: Disk, Surface, and Face and Knife Grinding Machines	Oct. 82
Gibson Electric Co.: Electrical Contacts Made from a Powdered Metal Composition	July 206	Grinding Machine, Arter Model D Rotary Surface	Oct. 129	Traveling-wheel Grinding Machine for Grinding Edges of Armor Plate	Aug. 134
Giddings & Lewis Machine Tool Co.: Horizontal Boring, Drilling, and Milling Machines	Oct. 69	Grinding Machine, Bergam Bench Type Internal	Oct. 137	Handwheel for Transmission Equipment, Reeves "Speedial"	Aug. 146
Gillen, George M.: Producing Heavy Machine Members by the Flame-cutting Method	Nov. 169	Grinding Machine, Cincinnati Hydraulic Universal Mar. 143	Handy & Harman: Low-temperature Silver Brazing Alloy Used on Heavy Current Conductors	Mar. 139	
Gillies, Frederick M., Personal of	Sept. 63	Grinding Machine, Cincinnati Hydraulic Universal—Correction	Apr. 194	Quick Method of Applying Large Shanks to Small Drills	Apr. 169
Gisholt Machine Co.: New Automatics and Dynetric Balancing Machine	Oct. 92	Grinding Machine, Crystal Lake Plain	Feb. 146	Hanley, William A., Personal of	Aug. 152
Gits Bros. Mfg. Co.: Hydraulic Automatic Lathe	June 152	Grinding Machine, Crystal Lake Universal Bench Dec. 282	Hanna Engineering Works: High-speed Pneumatic Riveter	Sept. 50	
Multiple-cutter Turner for Turret Lathes	June 161	Grinding Machine, Exhaust Attachment for B & S Cylindrical	June 150	Electro-hydraulic Riveting Machine	Nov. 218
Two Fifty-year Awards Made to Employees	June 180	Grinding Machine for Traveling Edges of Armor Plate, Hanchett Traveling-wheel	Aug. 134	Hannifin Mfg. Co.: Plastic Molding Press of 50 Ton Capacity	Mar. 146
Glynn Bros. Mfg. Co.: Gear-case Oil-gage Plugs	Sept. 56	Grinding Machine, Gleason No. 15 Gear and Pinion	Oct. 111	Hydraulic Forging Press	May 140
Glass Surfaces, New Process Prevents Glare from Reflected Light on	Sept. 64-D	Grinding Machine, Hertlein Precision Tool	Oct. 138	Combination Tool-room Machine	June 151
Gleason Awarded the A.S.M.E. Medal, James Emmett	Jan. 153	Grinding Machine, Jones & Lamson Automatic Thread-Grinding Machine	Oct. 128	Hanson-Van Winkle-Munning Co.: Insulating Joints for Pipe Lines in Plating Shops	Jan. 164
Gleason Works: No. 15 Gear and Pinion Grinding Machine Oct. 111		Grinding Machine, Mattison High-powered Surface Oct. 95	Type MI Buffing and Polishing Lathe	Feb. 147	
Flame-hardening of Gear Teeth	Feb. 123	Grinding Machine, Moore Jig	"Met-Hub" Scratch Brushes	May 146	
Seventy-fifth Anniversary Celebrated by Company	May 123	Grinding Machine, New Hydraulic System Developed for a Small R. E. Price and F. A. Firnhaber	Nov. 182	Hard-facing Rod, Haynes	Feb. 143
Glycerine as a Lubricant	Feb. 99	Grinding Machine, Oliver Tempier Tool-bit	Oct. 146	Hardened by New Electric Method, Inside of Cylinders and Bores	Dec. 296
Glycerine in Grease Lubricants	Dec. 242	Grinding Machine, Oliver Tool and Cutter	Feb. 139	Hardening, see also Heat-treating.	
Glyco Products Co., Inc.: Sealing Compound for Hydrocarbon Pipes and Containers	June 145	Grinding Machine, Porter-Cable Abrasive-belt	Apr. 183	Hardening Adopted for Jacobs Chucks, Tocco Nov. 202	
Goldeberg, Michael: Converting Horizontal to Vertical Oscillation by Simple Mechanism	May 103	Grinding Machine, Robot Surface	Feb. 142	Hardening and Hard-surfacing, Flame	June 123
Goldstein, M. J.: Friction-drive Roll Feed	Oct. 153	Grinding Machine, Seybold Precision Knife	Aug. 141	Hardening and Measuring Gears, New Fellows Machines for Cutting	Nov. 209
Forming Spacing Tubes from Flat Blanks	Dec. 262	Grinding Machine, Taft-Perce Surface	Oct. 135	Hardening, Flame, see Flame-hardening.	
Dies for Producing Tapered Tubes from Sheet Brass	Dec. 265	Grinding Machine, Walker Single-stroke Surface Oct. 83	Hardening Machine for Small Parts, Tocco Surface	Jan. 183	
Some Novel Operations in Making a Spot-light Lamp	Feb. 112	Grinding Machine with Anti-friction Table, Norton Tool and Cutter	Nov. 214	Hardening Machine, Reciprocating Clean	May 142
Drawing and Forming Deep Tapered Shells	Mar. 95	Grinding Machine with Interchangeable Surface and Cutter Grinding Heads, Doall	Jan. 188	Hardness Tester, Knerr-King Portable Brinell Sept. 56	Dec. 286
Die for Producing Clamp for Spot-light Lamp May 118		Grinding Machine with Traveling Work-table, New Cylindrical	Feb. 138	Hardness Tester, "Steeltest"	
Using One Set of Dies for Two Different Shells June 115		Grinding Machine with Under-head Slide-bar, Bryant Internal	Nov. 212	Hardness Testing Machine for Large Castings and Forgings, Hydraulically Operated Brinell	Sept. 53
Performing Broaching Operations in Foot and Power Presses	Aug. 98	Grinding Machines, Air Purifier Attachment for B & S Plain	Jan. 185	Hardinge Brothers, Inc.: Precision Lathe and Second-operation Machine	Oct. 105
Goodrich Co., B. F.: Synthetic Coating Protects Conveyor Belting Apr. 171		Grinding Machines, Automatic Cross-feed for Production and Tool-room Surface	Aug. 80	Fiftieth Anniversary Celebrated	Feb. 126
Liberty Rubber	July 206	Grinding Machines, Gardner Precision Disk	Oct. 92	Precision Tool-room Milling Machine	May 138
Gordon, George L., Personal of	Apr. 198	Grinding Machines, Hanchett Disk, Surface, and Face and Knife	Oct. 82	Collet Indexing Fixtures	June 163
Goss & DeLeeuw Machine Co.: Two-spindle Automatic Chucking Machine Oct. 133		Grinding Machines, Latest Types of Landis	Oct. 74	Hardy, Inc., Charles: "Sinterloy" Powdered Metal Products Steel Parts of High Quality	Aug. 128
Gould & Eberhardt: New Hobbing Machines and Improved Shapers Oct. 94		Grinding Machines, Revolving-spindle Headstock Equipment for B & S	Apr. 177	Harmer, Oscar, Obituary of	Dec. 298-A
Gourley, W. L., Personal of	July 232	Grinding Machines, Triplex Announces New Jig Boring, Gear Grinding, and Centerless	Oct. 132	Harnischfefer Corporation: Electric Hoist Operated Like an Elevator Sept. 41	
Government, Industry Pays the Bill of a Waste-ful May 1940		Grinding Master Connecting-rods in an Italian Aircraft Plant	May 109	Welders Connected in Parallel for Increased Capacity	Sept. 54
Government's Attitude Toward Business, Labor Recognized Serious Consequences of	Mar. 110	Grinding Practice, American Thread, Ralph E. Flanders	Sept. 1	Hoist with Explosion-proof Electrical Equipment Running Electric Welding Machines in Parallel	Sept. 58
Grab and Tranrail Carrier, Cleveland Full-rotation Box	May 148	Grinding Practice, European Thread	Dec. 255	Harradine, W. J., Personal of	Jan. 176
Grab and Tranrail Carrier, Tilting Box	Aug. 145	Grinding Practice, European Thread	Dec. 263	Harris, Albert E., Obituary of	Jan. 158
Grade-O-Meter for Determining Correct Grade of Grinding Wheels, Portable	Apr. 187	Grinding Spindle and Hydraulic Power Unit, Ex-Cell-O	Oct. 136	Harris, Jr., Brigadier General Charles T.: Spending Millions to Re-equip Army arsenals Oct. 84	
Graphite to Reduce Abrasion, Metal Parts Impregnated with	Mar. 139	Grinding Wheel, see Wheel.		Harrison, Harold M.: Vulcan Methods Speed Production of Fighting Planes	July 170
Graphite, Proposed Standard for Engineering and Scientific	Apr. 169	Grinding Wheels, Portable Grade-O-Meter for Determining Correct Grade of	Apr. 187	Hartley, Frank: Lever Mechanism Simplified by Means of Universal Joints	Nov. 180
Gray Co., G. A.: "Maximum Service" Planer	Oct. 131	Grob Brothers: Band Sawing and Chain Filing Machine	Oct. 140	Holder that Permits Tool to be Pivoted	Feb. 121
Great Britain, see also England, British		Improved File-chain for Filing Machines	May 145	Foot-operated Mechanism for Transmitting Rotary and Linear Movements	Mar. 109
Green, V. Wayne, Personal of	Jan. 197	Metal Band Saw	Aug. 139	Hakins Co., R. G.: Addition to Line of Air-controlled Tapping Machines	Oct. 75
Greenerd Arbor Press Co.: Ten-ton Hydraulic Press	Feb. 141	Crank and Link Mechanisms for Increasing Angular Movement of Shaft	Sept. 20	Bench-type Flexible-shaft Machine	May 144
Straightening Blocks and 6-ton Hydraulic Press Mar. 148		Automatic Sheet-metal Riveting Machine Operated by Compressed Air	Dec. 253	Hastellloy Corrosion-resistant Alloy-steel Sheets	Apr. 170
Greenlee Bros. & Co.: Six-spindle Automatic Screw Machine	Oct. 89	Novel Intermittent Feeding Mechanism	Jan. 151	Hathaway, George G., Personal of	Mar. 155
Hand Benders for Tubing	July 147	Simple Method of Drawing a Long Line	Jan. 169	Hayton, W. D., Personal of	Feb. 152
Griffiths, Frederick J., Personal of	Dec. 298	Variable-stroke Toggle-lever Mechanism for Press	Mar. 109	Haynes Stellite Co.: Growing Operations Performed with Stellite Tools	Feb. 100
Grinder, "All Purpose" Toolpost	Sept. 61	Groove Gage, Micrometer, Eric A. Reibig	Dec. 264	Hard-facing Welding Rod	Feb. 143
Grinder and Utility Drills, Clark Portable	Oct. 137	Grooving Machine, Wicaco Heavy-duty Oil	Mar. 144	Hastellloy Corrosion-resistant Alloy-steel Sheets	Apr. 170
Grinder, Baldor Improved Carbide Tool	Feb. 144	Grooving Operations Performed with Haynes Stellite Tools	Feb. 100	Headstock Equipment for B & S Grinding Machines, Revolving-spindle	Apr. 177
Grinder Blades, Fansteel Centerless	Mar. 152	Guide-post Covers, Danly Safety	Feb. 147	Heald Machine Co.: Example of Excellent Lighting in Designing Department	Mar. 105
Grinder for Laboratory Use, Fisher's Belt	Nov. 228	Guides for Blanking Dies, Adjustable Tension	Feb. 147	Heat-treatment, Gear Materials and Their	Mar. 105
Grinder for Single-slip Engraving Cutters	Aug. 144	Donald A. Baker	June 134	Heat-treating Equipment, Value of Nickel in July 206	
Grinder, Hybco Tap	July 215	Gun Equipped with Extension Handle, Spot-welding	Nov. 220	Up-to-date, William Hogg	Nov. 174
Grinder, J-B Tap	June 158	Guns at Watertown Arsenal, Manufacturing Parts for Big, Colonel Roland W. Case:	Mar. 99	Heat-treating, see also Hardening.	
Grinder, K. O. Lee Reamer and Cutter	Dec. 290	2	2	Heat-treatment, Gear Materials and Their	Mar. 105
Grinder, Mall Flexible Shaft	Oct. 143	Colonel Richard H. Somers:	Feb. 97	Heat-treatment of Steel, Selection and	June 136
Grinder, Radius-forming Attachment for Cutter, John W. Gerdel	July 198	Guns at Watertown Making the Army's Big	97	Heat-treatment of Tool Steels, Robert C. Deale:	Sept. 33
Grinder, Small Size Portable, Pneumatic	Sept. 60	Colonel Richard H. Somers:	97	1	Dec. 257
Grinder, Speedway Portable Bench	Dec. 293	Gusher Coolant Pump for Small Machine Tools	June 165	Heaters for Chrysler Corporation Air-control Systems, Manufacturing, Charles O. Herb, Apr. 152	
Grinder, Sterling Motor-driven Drill	July 224	2	2	Heaters for Tempering Baths, Westinghouse "Corox"	Apr. 192
Grinders, Baldor Ball-bearing	Aug. 145	Gustafson, George E., Obituary of	Feb. 158	Heath, R. F., Personal of	June 176
Grinders, Rotor Die	Aug. 148	99	"Hecotex" Sensitized Linen for Making Photo-print Tracings	July 226	
Grinders, Rotor "Power-Pin"	Sept. 62	2	2	Hedler, C. W., Personal of	Nov. 234
Grinders, Rotor Vertical Air	Jan. 190	1	1	Heimroth Electric & Mfg. Co.: Four-speed Gear Drive	Aug. 146
Grinders, Tap-relieving Attachment for Bergman Utility	Dec. 292	1	1	Heilminen, Jerry L.: Link Mechanism for Increasing Angular Movement of Shaft	Jan. 151
Grinding and Internal Lapping Machines, Ex-Cell-O Thread	Oct. 104	1	1	Two-way Stop for Angular Movement of Shaft	May 104
Grinding and Lapping Machines, Latest Types of Norton	Oct. 100	1	1	Straight-line Reciprocating Motion for Link-supported Ram	Aug. 103
Grinding Attachment, Brown & Sharpe Internal June 162		1	1	Hendey Machine Co.: Tool and Gage-makers' Lathe	Oct. 128
Grinding Attachment, Covel Radius	Nov. 220	1	1	Henry & Wright Mfg. Co.: "Speedmaster" Dieing Machine and Stock Straightener	Oct. 134
Grinding Attachment, Dumore Thread	Oct. 144	1	1	Herb, Charles O.: Around the World with American Machine Tools	Jan. 109
Grinding Attachments, Brown & Sharpe End-mill Aug. 139		1	1	Hobbing Molds in the General Electric Plastics Department	Feb. 87
Grinding Block, Threading Tool, William C. Betz Jan. 169		1	1	Latest Practice in Forging Shells	Mar. 89
Grinding Center Hole, Clamping Fixture for Holding Work while, Edward L. Peterson	Nov. 189	1	1	Producing Oldsmobile's Sensational Drive	Apr. 110
Grinding Eccentric, Fixture for J. R. Whittles June 129		1	1		
Grinding, Increasing the Life of Cutting Tools by an Improved Method of, Leo J. St. Clair	Dec. 267	1	1		
Grinding Job, Using Die-grinder on Lathe Face-plate for Planetary, H. J. Chamberland	May 117	1	1		
Grinding Large Odd-shaped Work on Various Types of Machine Tools	Dec. 248	1	1		
Grinding Machine, a New Landis Hydraulic Plain Sept. 38		1	1		

Chevrolet Connecting-rods Made by Ultra-modern Methods	Apr. 122	Wire Insulation Stripper with Vacuum Collector	Jan. 191	Jig Boring Machine with Power Rapid Traverse, Cleereman	July 217
Manufacturing Heaters for Chrysler Corporation Air-control Systems	Apr. 152	Coil Winder Drive	Feb. 145	Jig Clamp, Quick-acting, Victor Roselund	June 135
Centrifugally Cast Gear Blanks Introduced by Ford	May 85	"Instant Heat" Electric Solderer	Mar. 152	Jig for Drilling Ninety-six Evenly Spaced Angu-lar Holes in Ring, H. Kaffine	Aug. 114
Machining Automobile Flywheels at the Chevrolet Plant	June 103	Live Center with Interchangeable Inserts	Apr. 183	"Jig Grinder," Moore	Jan. 182
Boeing Specializes on Four-engine Airplanes	July 158	Portable Universal Electric Etcher	Aug. 145	Jigs, Design of Universal Drill, Joseph I. Karash	Nov. 161
Allison Engines Built in a Shop as Modern as Flight Itself	July 164	"Ideal" Variable-speed Lathe for Bench Mounting	Sept. 59	Jigs, 1	Nov. 243
Biggest Builder of Flying Boats	July 188	Iluum Now Available in Strip, Tubing, and Bar Stock	Sept. 42	Jirasek, John V., Personal of	May 154
Unique Practices in Producing Oldsmobile Front Fenders	Aug. 83	Imports, Soviet Machine Tool	Jan. 173	Jobs are Created by Industry—Not by Government	Dec. 252
Herriman, J. W.: Improvised Steadyrest Made from Hard Wood Block	June 135	Inclinable Presses, Die Design for, Joseph I. Karash:	May 1	Jobs are Created, How	Jan. 194
Hertlein, Carl J.: Precision Tool Grinding Machine	Oct. 138	"Incolap" for Finishing Small Gears, Bench Model	Aug. 143	Jobs, It Sounds so Easy: Industry Ought to Provide More	Mar. 108
Hewitt Rubber Corporation: All-neoprene Transmission Belts	Sept. 49	Independent Pneumatic Tool Co.: "Thor Bantam" Portable Pneumatic Grinder	Sept. 60	Jobs? Who Makes	July 236
Bonding Rubber and Neoprene to Steel and Aluminum	June 144	Thor Portable Electric Nibbler for Cutting Sheet Metal	Feb. 146	Johns-Manville: Machine-vibration Isolator	Apr. 186
Hiatt, H. D., Personal of "Hi-Duty" Tapping Machine, Kaufman	Aug. 152	"Thor-Nado" Portable Electric Hammer	Mar. 153	Johnson, Charles H., Obituary of	June 176
Higgins, John W.: The Industrial Museum	Sept. 14	Indexing Fixtures, Hardinge Collet	June 163	Johnstone, R. L., Personal of	Jan. 200
High Speed Hammer Co., Inc.: Super-sensitive Drilling Machine	Sept. 57	Indexing Milling Fixture	Aug. 118	Joint of Unique Design, Welded Flange, George B. Cramp	Nov. 188
Hilco Oil Reclaimer	Oct. 137	Indicator for Use in Making Accurate Measurements, Electronic, R. G. Minarik	Mar. 133	Jones & Lamson Machine Co.: American Thread-grinding Practice	Sept. 1
Hilliard Corporation: Hilco Oil Reclaimer	Oct. 137	Indicator Parts, Solid Plastic Block Replaces Several	Aug. 129	Die-heads 168 and 168B	Sept. 53
Hills, Yale D., Personal of Hi-steel Used in "Snow Cruiser" Wheels	May 156	Indicator Showing Variations in Thickness of a Millionth Inch Surface	Sept. 16	New Chaser-holders for J & L Tangent Die-head	Sept. 60
H. J. J. Co.: Screw-holding Driver	Sept. 61	Indicators with Magnetic Bases, Brown & Sharpe Dial Test	Dec. 295	Fay Automatic Lathe, Universal Turret Lathe, and Automatic Thread-grinding Machine	Oct. 128
Hob-sharpening Machine, Barber-Colman Automatic	Sept. 175	Industrial Colloids Corporation: New Lubricant Developed for Packings	Apr. 171	Comparator for Inspecting Spherical Surfaces	Nov. 212
Hob Thread-milling Machine, Coulter Semi-automatic	Sept. 177	Industrial Enterprise a Chance, It is Time to Give	Sept. 18	Jones Foundry & Machine Co., W. A.: Worm-helical Speed Reducers	Oct. 138
Hobbing Machine, Barber-Colman Vertical	Oct. 106	Industrial Management Society: Time and Motion Study Meeting to be Held in Chicago	Nov. 175	Jones, Robert A., Personal of	Feb. 154
Hobbing Machine, see also Gear Hobbing Machine		Industrial Museum, The, John W. Higgins	Sept. 14	Josephson, Jr., Walter, Personal of	Aug. 154
Hobbing Machines and Improved Shapers, Gould & Eberhardt New	Oct. 94	Industry Expands, British War	Mar. 110	Kaffine, H.: Jig for Drilling Ninety-six Evenly Spaced Angu-lar Holes in Ring	Aug. 114
Hobbing Molds in the General Electric Plastics Department	Charles O. Herb	Industry Holds the Key Position in the Defense Program	July 194	Karapetoff, Vladimir, Personal of	Sept. 63
Hoerle, Newton S., Personal of	Sept. 64-A	Industry—Not by Government, Jobs are Created by	Dec. 252	Karash, Joseph I.: Design of Universal Drill Jigs:	Nov. 161
Hoffman, Ralph M., Personal of	Jan. 197	Industry Pays the Bill of a Wasteful Government	May 102	2	Dec. 243
Hogg, William: Up-to-date Heat-treating Practice in the National Acme Plant	Nov. 174	Ingersoll-Rand Co.: "Oil-ir" Air-line Lubricator	Jan. 192	Did Design for Inclinable Presses:	May 106
Hogland, G. O., Personal of	Nov. 234-A	Light-weight Riveting Hammer	Sept. 186	1	June 126
Hoist for All Industrial Applications, "Speed-master"	Sept. 54	Air Tools for Aircraft Industry	July 228	2	
Hoist, Light-weight Corrosion-resisting Electric	Feb. 149	Inland Steel Co.: Hi-steel Used in "Snow Cruiser" Wheels	Feb. 132	Kasper, L.: Mechanism for Operating a Floating Jaw Vice	Sept. 19
Hoist Operated Like an Elevator, Electric	Sept. 41	Production and Use of Leadloy Abroad	Feb. 149	Mechanism for Obtaining Uniform Adjustment of Guide Rollers	Oct. 154
Hoist with Explosion-proof Electrical Equipment	Sept. 41	Inspection Machines, Need for High-production	William F. Piach	Mechanism for Reducing Oscillating Motion	Nov. 179
Hoists, Load Lifter Jr. Electric	Apr. 184	Inspection Machines, Zeiss Measuring and	Oct. 142	Pivoted Holder for Cam Follower Rolls Provides Unusual Reciprocating Motion	Jan. 152
Holder for Special Buffing and Polishing Tips	James H. Rodgers	Inspection, see also Gaging	May 58	Oscillating Mechanism for Milling Machine	Feb. 107
Holding Devices, Quick-acting, F. Server	May 114	Inspections per Hour on Ford Crankshafts, Fifteen Thousand	Apr. 128	Shaping Attachment	June 121
Holding Small Punches in Punch Pad	Donald A. Baker	"Instant Heat" Electric Solderer	Mar. 152	Reversing Mechanism for Chain-driven Table	July 195
Hole Testing Attachments for Dial Test Indicators, B & S	Sept. 118	Instrument Specialties Co., Inc.: Beryllium-copper Springs Made to Meet Precision Requirements	Sept. 43	Intermittent Gear Mechanism	July 200
Hollengreen, M. A., Personal of	June 174	Instruments at Frankford Arsenal, Manufacturing Small-arms Ammunition and	Colonel Edwin D. Bricker	Milling Fixture for Cutting Irregular Shapes	July 200
Holmstrom, Andrew B., Personal of	Aug. 152	Production and Use of Leadloy	Feb. 149	Kato Engineering Co.: Direct-current Motor Designed to Furnish Alternating Current	Mar. 151
Holslag, C. J., Personal of	Nov. 234-A	Inspection Machines, Need for High-production	William F. Piach	Kaufman Mfg. Co., L. J.: Semi-automatic Threading Machine	Feb. 141
Homocarb Furnace, Leeds & Northrup Automatically Controlled	Jan. 186	Inspection, see also Gaging	Oct. 78	"Hi-Duty" Tapping Machine	June 155
Hone, Amico Small-bore	Jan. 193	Inspections per Hour on Ford Crankshafts, Fifteen Thousand	Apr. 128	Kearney & Trecker Corporation: Milling Machines Recently Developed by Company	Oct. 99
Honegger, John A.: Simplex Automatic Stock Reel	Feb. 149	Instrument Specialties Co., Inc.: Beryllium-copper Springs Made to Meet Precision Requirements	Sept. 43	Motion Picture Showing Tool and Die Milling Operations	Aug. 99
Roller Type Tool for Shell Trimming Machine	June 132	Instruments at Frankford Arsenal, Manufacturing Small-arms Ammunition and	Colonel Edwin D. Bricker	Kellogg, David R.: Selecting the Best Material for a Given Application	June 113
Portable Pressure Oil Flusher and Dispenser	June 164	Leadloy Steel for Tractor Shoes	Mar. 115	"Kem Bakolese" Enamel Brings Color to Plain Plastics	Aug. 128
Honing Equipment Corporation: Floor Type Honing Machine	Dec. 290	Selection and Heat-treatment of Steel	June 136	"Kem Plastite" Enamel Brings Color to Plain Plastics	Aug. 128
Honing Machine for Small Cylindrical Work	July 218	Materials for Hydraulic Press Cams	July 204	Kennametal, "Go" and "No Go" Gages Tipped with	June 166
Honing, New Stone for Superfinishing and High-speed	July 222	Value of Nickel in Heat-treating Equipment	July 206	Kennametal Inserts, Work Supports with	May 147
Hood for Industrial Workers, Protective	Apr. 185	Inventors, Honoring	Mar. 154	Kennametal Lathe Tools Provided with Chip-breakers for High-speed Turning	Oct. 160-D
Hoover, George W., Personal of	Feb. 156	Iron Used for Airplane-engine Castings, Nickel-alloy	June 144	Kennametal, Steel-cutting Shaper Tools Tipped with	Feb. 145
Horner, H. Mansfield, Personal of	July 232	Iron with Tensile Strength of 40,000 Pounds per Square Inch, Plain Gray	Sept. 42	Kennametal-tipped Blade Milling Cutters, Mc-Crosky	Jan. 189
"Hornet" Electric Arc Welder, Wilson Nov.	May 228	Iron Worker, Buffalo Universal	Oct. 125	Kennametal Tool Tip Material, New	July 226
Horsepower Capacity of Sloping and Vertical Belts, W. F. Schaphorst	May 119	Isdale, John S., Personal of	Mar. 158	Kennametal, Variety of Wear-resistant Parts Made from	Jan. 175
Horsepower, New Meter for Measuring Shaft	Mar. 106	Isolator, John-Manville Machine-vibration	Apr. 186	Kennicott, W. L., Personal of	Apr. 196
Houser, O. G., Personal of	June 174	J		Kent Machine Co.: Duplex Horizontal Drilling Machine	May 140
Hughes, Frederick G., Personal, Mar. 155	July 232	Jacker, M.: Work-locating Mechanism for Milling Machine	Sept. 26	Kent-Owens Machine Co.: Hydraulic Milling Machine	Oct. 139
Huisse, Robert E.: Angle-gage for Screw Machine Work	Jan. 167	Quick-loading Chucks or Arbors	Sept. 29	Milling Machine Designed to Handle Long Work	Apr. 182
Hunt, G. E., Personal of	June 169	Variable-stroke Mechanism	Nov. 179	Double-spindle Milling Machine	Aug. 136
Hunter Electro-Copyist, Inc.: Sensitized Linen for Making Photoprint Tracings from Pencil Drawings	July 226	Self-contained Packing for Hold-down Clamp	Dec. 262	Kerr, D. S., Personal of	May 158
Huston, Jr., Charles L., Personal of	Oct. 169-K	Mechanism for Picking up and Transferring Thin Plates	Feb. 197	Keuffel & Esser Co.: Spider Webs in Industry	Sept. 62
Hydro Tap-grinder	July 215	Mechanism for Increasing Angular Movement of Shaft	May 103	Albanene—a New Type of Tracing Paper	Oct. 196
Hydra-Matic Drive, Producing Oldsmobile's	Apr. 110	Forming Spacing Tubes from Flat Blanks	May 114	Keyseating Machine, Reed-Prentice	Dec. 285
"Hydra" Stainless-steel Valve	July 216	Jackson, David E., Personal of	May 156	Kimball, Dexter S., Distinguished Engineering Educator, Honored	Jan. 196
Hydraulic Accumulator with Air Ballast	Oct. 160-D	Jacks for Use in Replacing Gaskets in Flanged Pipe, Flange	Mar. 128	King, Andrew: Knerr-King Portable Brinell Hardness Tester	Sept. 56
Hydraulic Press Mfg. Co.: Fastravers and Injection Molding Presses	Oct. 130	Jackson Electrode Holder Co.: Protective Hood for Industrial Workers	Apr. 185	Knirk, Robert E.: New Process for Producing Corrosion-resistant Sheet Steel	Feb. 116
Scrap Metal Baling Press	Dec. 282	Jackson Machine & Tool Co.: High-speed Vertical Boring Machine and Die-sinking Machines	Sept. 139	Kirkpatrick, C. N., Personal of	May 156
Turret Type Cartridge-case Heading Press	Mar. 145	Jacobs, Leo E., Personal of	Nov. 234	Knerr-King Portable Brinell Hardness Tester	Sept. 56
250-ton H-P-M Fastraverse Press	May 137	Japanese Shops, Progressive Methods in	Jan. 144	Knife-grinding Machine, Seybold Precision	Aug. 141
Vertical Type Injection Molding Press	June 155	Jefferson Machine Tool Co.: Turret and Pull-feed Attachments for Lathes	June 153	Knight, Machinery Co., W. B.: High-speed Vertical Milling Machine	Oct. 87
Hydraulic Press, see Press		Jessop Steel Co.: Rolled Composite Die-section Shapes	Sept. 130	Knight, Percy H., Obituary of	June 178
System Developed for a Small Grinding Machine, New, R. E. Price and F. A. Firnhaber	Nov. 182	New Method of Welding Stainless-clad Steel	Oct. 153	Knight, Cecil M., Personal of	May 151
Hydro-Dynamic Press for Redrawing Cartridge Cases, Bliss	July 216	Silver-Ply Stainless-clad Sheets for Various Applications	May 130	"Knock-Out" Universal Grinder	Dec. 290
Hydrohoncer, The Micromatic	Oct. 119	Jig Boring, Gear, Grinding, and Centerless Grinding Machines, Triplex Announces New	Oct. 130	"Knu-Kam-Klamp"	Aug. 147
Hypro Planer Type Milling Machine, Cincinnati	Dec. 279	Jig-boring Machine and Radial Drilling Machine, Cincinnati-Bickford	Oct. 132	Knu-Vise, Inc.: Type KV Toggle Clamp	Feb. 143
"Hypro" Vertical Boring Mill, Cincinnati	Oct. 83	Jig Boring Machine and Sliding Head Drilling Machine, Cleereman	Oct. 132	"Knu-Kam-Klamp" Toggle Type Work-holding Clamp	Aug. 147
Hyprolap for Finishing Flat or Cylindrical Parts	Norton	9		Koch, Bob, Personal of	June 174
Ideal Commutator Dresser Co.: Motor Base Provided with Spring Tension	Oct. 136			Krivbak, Irvin V. N., Personal of	Jan. 200
				Kuz-Lohner Machine Co.: Die-casting Machines and Plastic Tablet Pre-forming Machine	Jan. 187
				Kwik-Klamp Toggle Clamps, Danly	Nov. 218

L	
Labor Recognizes Serious Consequences of Government's Attitude Toward Business	Mar. 110
Lake Erie Engineering Corporation:	
Hydraulic Straightening Press	May 143
Long-stroke Hydraulic Press	Aug. 144
Lamp, Die for Producing Clamp for Spot-light	
M. J. Goldstein	May 118
Lamp, Some Novel Operations in Making a Spot-light	M. J. Goldstein Feb. 112
Lamp, Westinghouse 58-inch Fluorescent	May 139
Landis Machine Co., Inc.:	
Four-spindle Semi-automatic Threading Machine	Oct. 118
Landimaco Threading Machine for Automobile Steering Pivots	Nov. 218
Collet Chuck Carriage Front for Landis Threading Machines	Mar. 144
Landimaco Threading Machine Equipped for Threading Shells	Apr. 181
Landimaco Equipped for Threading Rock Bit Steel	June 157
Landis Tool Co.:	
A New Hydraulic Plain Grinding Machine	Sept. 38
Latest Types of Landis Grinding Machines	Oct. 74
New Hydraulic System Developed for a Small Grinding Machine	Nov. 182
Open House Held in New Erecting Shop	Jan. 195
Landimaco Threading Machine Equipped for Tapping Shells	Apr. 181
Langdon, Tracy B.:	
Cutting Oils and Their Application	Mar. 93
Lap Hones for Multi-purpose Reciprocating-head Tools, Diamond	Apr. 194
Lapping Machines, Ex-Cell-O Thread-grinding and Internal	Oct. 104
Lapping Machines, Latest Types of Norton Grinding and	Oct. 100
Lapping Small Gears, Bench Model "Incolap" for	Aug. 143
LaQue, F. L., Personal of	May 154
Larkin Air Vise Co.:	
Air-operated Vise	Mar. 153
Larson, C. B.:	
Flat Polishing Attachment	Nov. 225
Larsson, Thure L. F., Personal of	Mar. 158
Lathe and Bench Lathe Unit, Elgin Bench	June 152
Lathe and Second-operation Machine, Hardinge Precision	Oct. 105
Lathe Attachment for Machining Spherical Seats of Special Valves, Stanley Porritt	Aug. 116
Lathe Beds Designed for Maximum Strength and Rigidity	Nov. 170
Lathe Faceplate for Planetary Grinding Job, Using Die-grinder on, H. J. Chamberland	May 117
Lathe for Bench Mounting, "Ideal" Variable-speed	Sept. 59
Lathe, Gisholt Hydraulic Automatic	June 152
Lathe, Grinding Spherical Shapes in a, John W. Gerdel	Dec. 263
Lathe, Heavy-duty Fay Automatic	Oct. 128
Lathe, Hendey Tool and Gage-makers'	Oct. 128
Lathe, Niles "Time Saver"	Oct. 122
Lathe, Lipe Hydraulically Controlled	Oct. 139
Lathe, South Bend 10-inch Tool-room	July 214
Lathe, Ston, Portman Multiple-diameter	Jan. 194
Lathe Tail-spindle and Center-drill Holder, William S. Rowell	Aug. 118
Lathe, Turret, see Turret	
Lathe with Center Drive, Wickes Hydraulically Operated Crankshaft	Dec. 288
Lathe with Foot-pedal Control, Speed	June 160
Lathes and Cutter Grinding Machine, LeBlond Oct. 117	
Lathes Developed by the Monarch Machine Tool Co., New	Oct. 141
Lathes Equipped with Vacuum Chucks, Speed	May 141
Lathes, Multi-speed Wood-turning	Nov. 222
Lathes Now Built in Three Models, Sundstrand Automatic Stub	Sept. 48
Lathes, Improved Design, Bradford	Nov. 217
Lathes, Rivett Screw-cutting and Precision Bench	Oct. 191
Lathes, Sebastian Type S Geared-head	Oct. 129
Lathes, Willard Milling Head for	Apr. 181
Lathes with 14- to 36-inch Swing, Sidney	Oct. 123
"Lattice-Braid" Packing	June 160
Lawrence, Fred L., Personal of	July 232
Lawrence, W. Leslie, Personal of	Aug. 152
Lay-out Dope, Toolmakers'	Aug. 149
Lay-out Punches, Nielsen	Aug. 143
Leather Belting Made up from Links, New Type of	June 118
Lebanon Steel Foundry:	
Silver-bearing Stainless Steels Available in the Form of Castings	July 207
LeBlond Machine Tool Co., R. K.:	
Redesigned Lathes and Cutter Grinding Machine	Oct. 117
Ledlow Abroad, Production and Use of	Feb. 149
Lee & Son Co., K. O.:	
Alternating-current Arc Welders	Oct. 143
Reamer and Cutter Grinder	Dec. 290
Improved Arc Welders	Mar. 146
Duplex Welder	Apr. 185
Leeds & Northrup Co.:	
Industrial Optical Pyrometer	Nov. 224
Automatically Controlled Homocarb Furnace	Jan. 186
High-speed Temperature Recording Equipment	Apr. 176
Leland-Gifford Co.:	
Rail Type and Multiple Adjustable-spindle Drilling Machines	Oct. 123
LeMaire Tool & Mfg. Co.:	
Connecting-rod Grinding Machine and Vertical Drilling Machine	Dec. 285
Shell-centering Machine	Jan. 189
Two-way Horizontal Drilling, Boring, and Reaming Machine	Apr. 190
Lenney Machine & Mfg. Co.:	
Variable-speed Transmission	May 145
Lester Engineering Co.:	
Die-casting Machines for Aluminum and Brass Die-castings	July 218
Lewellen Mfg. Co.:	
Variable-speed Transmission for Winding Strip Metal	Feb. 145
Transmission Units for Flexible Speed Control	May 144
Liberty Rubber—A Synthetic Rubber Developed by B. F. Goodrich Co.	July 206
Lift for Industrial Plants, Walker Electric	Aug. 148
Lifter, Cullen-Friestadt Sheet-steel	Mar. 149
Lifts and Holds 4450 Times its Own Weight, Permanent Magnet	Mar. 107
Light, Fluorescent Drafting-table	Mar. 152
Lights, Industrial Diagnostic	July 228
Lighting, Modern Industrial Plant	Mar. 132
Lincoln Arc Welding Foundation, James F. 8200,000 Award Program Announced	Jan. 172
Details of \$200,000 Award Program	Apr. 204
Lincoln Electric Co.:	
"Wedlar" is Proposed as Name for Men Who Weld	Sept. 40
"Electrel 10" Electrode	Sept. 52
Diesel-engine Driven Arc Welder and Small Welder for Average Shop	Oct. 145
Announcement of Price Policy	Oct. 160-K
John Huntington Institute to Continue Welding Courses	Nov. 193
Junior 200-ampere Arc Welder	Nov. 220
Engine-driven Arc Welder	Jan. 183
Fabricating by Welding Saves Time	Feb. 129
"Stainweld 1D" Electrode	Mar. 145
Faceweld Hard-facing Electrodes	Apr. 187
Is Arc Welding a Difficult Process?	May 92
Long Experience Not Required in Making Reliable Welds	June 168
Unshackle Arc Welding and Speed Progress	Aug. 127
Lincoln, James F., Personal of	Feb. 154
Lindberg, Paul, Personal of	July 236
Linde Air Products Co., The "Oxweld MP-3" Portable Acetylene Generator	Sept. 59
Prest-O-Weld Welding and Cutting Equipment of Improved Design	Nov. 212
Oxy-acetylene Cutting Machine	Nov. 221
Oxweld Nozzles for Precision Oxy-acetylene Cutting	Dec. 292
Oxweld Nozzles Designed for Oxy-acetylene Gouging	Jan. 191
Oxweld Blowpipe Designed for Light Welding	Apr. 147
Welding Blowpipe and Cutting Attachment	Apr. 184
"Unionmet" Welding Machine of Unusual Capacity	May 105
Lindner Machine & Tool Co., Inc.:	
Two-spindle Adjustable Drilling Head for Small Drill Presses	Dec. 291
Linen for Making Photoprint Tracings from Pencil Drawings, Sensitized	July 226
Link-Belt Co.:	
Infinitely Variable Speed Transmission	Oct. 101
Variable-speed Transmission with Vernier Control	Feb. 148
"Easy Chain Detacher" for Steel Link-belt	Feb. 149
Link Engineering & Mfg. Co.:	
Spring Checker for Compression Springs	Dec. 294
Lipe, Inc., W. C.:	
"Carbo-Matic" Hydraulically Controlled Lathe	Oct. 139
Littell Machine Co., F. J.:	
Reel for Coils up to 4000 Pounds	Oct. 139
Motor-driven Reels for Handling Light-gage Coils	Nov. 223
Safety Press Feeding Devices	Jan. 188
Loach, W. J.:	
An Industrial Application of Electrically Cleaned Air	Aug. 89
Load Lifter Jr. Electric Hoists	Apr. 184
Locating Mechanism for Milling Machine, Work-M. Jacker	Sept. 20
Lock-nut Attaching Machine, FabriSteel "Fast-on"	Aug. 143
Lock-nut, Self-contained	Aug. 148
Lock-nuts Designed to Increase Thread Area in Sheet Metal	June 164
Lockheed Aircraft Corporation:	
Airplanes for Commerce and Defense	July 140
Locomotive Service, Molybdenum Steels for High-speed	July 230
Lord, Manly E., Personal of	Oct. 160-J
Lord Mfg. Co.:	
Bonded Rubber Flexible Coupling	Dec. 295
Heavy-duty Flexible Coupling	June 152
Lubricant Developed for Packings	Apr. 171
Lubricant, Glycerine as a	Feb. 99
Lubricant, Wire with Surface Impregnated by Dry	Aug. 129
Lubricants, Glycerine in Grease	Dec. 242
Lubricating Fanfarin Bearings, Porous Bronze Retainers for	Dec. 283
Lubrication of Rubber Parts	Sept. 26
Lubricator, Ingersoll-Rand Air-line	Jan. 192
Lucrators, Bijur Hydraulically Operated	Feb. 145
Lucas Machine Tool Co.:	
New Model Large Size Horizontal Boring, Drilling, and Milling Machines	Oct. 89
Ludlum, Frank, Obituary of	Jan. 202
Ludlum-Bord—Stainless-steel "Lumber" for the Construction Field	Apr. 171
Lufkin Rule Co.:	
Inside Micrometer Set	June 164
Lukens Steel Co.:	
Producing Heavy Machine Members by the Flame-cutting Method	Nov. 169
Huge Flywheels Made from Steel Plate	May 131
"Lumber" for the Construction Field, Stainless-steel	Apr. 202
Lundell, Otto, Obituary of	Apr. 171
Lycoming Division, Aviation Mfg. Corporation:	
Nickel-alloy Iron Used for Airplane-engine Castings	June 144
Me	
McCandlish, D. F., Personal of	Feb. 152
McCarthy, Charles J., Personal of	July 232
McCrosky Tool Corporation:	
Kennametal-tipped Blade Milling Cutters	Jan. 189
McDonald, Harry T., Obituary of	July 238
McDonough Mfg. Co.:	
Sterling Motor-driven Drill Grinder	July 224
McHenry, John J.:	
Piercing Die with a Special Stripping Device	Jan. 167
McIlhenney, E. L., Personal of	Mar. 155
McKellar, D. H.:	
Monarch Study Courses for Trained Shop Men	June 108
McKenna Metals Co.:	
New Lathe Tools Provided with Chip-breakers for High-speed Turning	Oct. 160-D
Variety of Wear-resisting Parts Made from Kennametal	Jan. 175
Kennametal-tipped Blade Milling Cutters	Jan. 189
Steel-cutting Shaper Tools Tipped with Kennametal	Feb. 145
Work Supports with Kennametal Inserts	May 147
"Go" and "No Go" Gages Tipped with Kennametal	June 166
New Kennametal Tool Tip Material	July 226
McKenna, Philip M., Personal of	Aug. 156
M	
Maas & Waldstein Co.:	
Baking Enamel that Reproduces Metal Colorings on Polished Parts	Sept. 43
Machine Deserves the Best in Supplies, The Best May 102	
Machine is Guilty of Destroying Priceless Violins, Now the	June 120
Machine Operators, Warner & Swasey Inaugurates Educational Program for	June 141
Machine Shop Training, New Treatise on	May 129
Machine Time? How Can We Reduce Idle	Oct. 114
J. R. Weaver	Oct. 114
Machine Tool Builder, A Machine Tool User's Tribute to the, William Watson	Oct. 152
Machine Tool Builders, Individual Shows Held by Nov. 208	
Machine Tool Builder's Next Goal, A. W. Seacord	Oct. 90
Machine Tool Exports to England, France, and Russia	Jan. 171
Machine Tool Less Special, Making the Special, O. W. Young	Oct. 102
Machine Tool Operation, Taking the Mystery Out of, B. G. Tang	Oct. 96
Machine Tool Sales in South America	Dec. 295
Machine Tools, American Industry Presents the World's Finest	Oct. 65
Machine Tools, Around the World with American, Charles O. Herb	Jan. 109
Machine Tools in General Motors Plants Overseas	Jan. 134
Machine Tools in Japanese Shops, American, Jan. 144	
Machine Tools in South America, Selling, H. K. Smyth	Jan. 132
Machine Tools in the Aircraft Engine Industry, J. Carlton Ward, Jr.	Oct. 72
Machine Tools in the Tractor Industry, James R. Munro	Oct. 126
Machine Tools, Modernized French Factories Use American	Jan. 126
Machine Tools Offer Means to a Higher Standard of Living	Oct. 150
Machine Tools, Social Benefits Derived from, Wendell E. Whipple	Oct. 66
Machine Tools to the U. S. Navy, Selling, Rear Admiral H. G. Bower	Oct. 108
Machines in England's Busy Shops, American: 1	Jan. 120
2	Mar. 116
Machines Produce More—Hence All Can Have More	Apr. 158
Machines, Russian Methods Developed Around American	Jan. 138
Machinery, Exports of Industrial Sept. 37, Oct. 160-A, Dec. 254, Jan. 158, March 114, April 168, Aug. 90	
Machinery Industries, Census of the	Feb. 109
Machinery Mfg. Co.:	
Combination Vertical Milling Machine and Jig Borer	June 161
Profiling Attachment for Vernon Vertical Mill and Jig Borer	July 226
Machinery, that has been Delivered When a Purchaser Refuses to Pay for, Leo T. Parker	July 204
MACHINERY Wins First Prize for Editorial Achievement	Oct. 151
Machining Chrome-nickel-molybdenum Steels of High Tensile Strength, A. J. Snyder	July 208
MacPherran, Ralph S., Obituary of	Dec. 298-A
"Magne-Blox" Angle-iron, Universal	Aug. 148
"Magne-Blox" Parallels and V-blocks for Magnetic Chucks	Apr. 190
"Magne-Gauge" for Measuring Metallic and Non-metallic Coatings, Improved	Jan. 193
Magnet Lifts and Holds 4450 Times its Own Weight, Permanent	Mar. 107
Magnetic Block, Brown & Sharpe Toolmaker's	June 162
Magnetic Chuck, see Chuck	
Magnus Chemical Co.:	
"Electrex" Cleaner for Electroplating	Sept. 39
Mall Tool Co.:	
Flexible Shaft Grinder	Oct. 143
Mallets, Pyralin-tipped	July 224
Mandrel Thrust Collar Designed for Lengthwise Adjustment, E. Waterman	Aug. 112
Manhattan Rubber Mfg. Division of Raybestos-Manhattan, Inc.:	
Vibration Dampener Bushing for Grinding Wheels	Nov. 232
Manufacturing for 1939, Census of	Dec. 266
Manufacturing in the United States, One Hundred and Thirty Years of	Mar. 131
Marking Device for Gears and Bushings	May 145
Marking Device for Round Shafts, Universal	Jan. 191
Marking Machine, Noble & Westbrook Rapid Precision	Apr. 182
Marking Machine, Power-operated	Nov. 223
Marking Press, Elmes Metal	Jan. 193
Marking Tools, Alloy Provides Increased Safety for	June 145
Marquette Mfg. Co.:	
Arc Torch for General Heating and Welding	Jan. 190
Marshall, O. S.:	
Unusual Set-up for Numbering Graduated Circles	Nov. 189
Martin, Charles J., Personal of	June 172
Martwick, W. L., Personal of	July 234
Marvel, David T., Personal of	May 158
Massachusetts, Tax and Labor Policies Attract Industries to	May 128
Master Electric Co., Industrial Equipment Division:	
"Speedmaster" Hoist for All Industrial Applications	Sept. 54
Material for a Given Application, Selecting the Best	David R. Kellogg June 113
Materials Artificially Aged by Salt Spray	Mar. 128
Materials, Condensed Review of Some Recently Developed	Nov. 196
Mattison Machine Works:	
High-powered Surface Grinding Machine	Oct. 95
Max Mfg. Co.:	
Universal Disk Sander	Aug. 140

"Maximum Service" Planer, Gray	Oct.	131
Mayoh, F. H.: Unusual Gages with Special Mountings and Dial Indicators	Sept.	27
Mayhoret, John A., Personal of	Apr.	198
Measurements, Electronic Indicator for Use in Making Accurate, R. G. Minarik	Mar.	133
Measuring and Inspection Machines, Zeiss	Oct.	142
Measuring Gears, New Fellows Machines for Cut- ting, Hardening, and	Nov.	209
Measuring Instrument, Unique Amplifying Mechan- ism for Precision	Feb.	127
Measuring Wires for Internal Gears	June	157
Mechanical Handling Systems, Inc.: High-capacity Variable-speed Drive Unit	Sept.	57
Mechanics Universal Joint Division, Borg-Warner Corporation Roller Bearing Universal Joints	Oct.	142
"Mechani-Seal" Bearings, Fafnir	Nov.	230
Mechanism, Converting Horizontal to Vertical Oscillation by Simple Michael Goldberg	May	103
Mechanism for Chain-driven Table, Reversing, L. Kasper	June	121
Mechanism for Increasing Angular Movement of shaft, M. Jacker	May	103
Mechanism for Increasing Angular Movement of Shaft, Link, Jerry L. Helminen	Jan.	151
Mechanism for Milling Machine Shaping Attach- ment, Oscillating, L. Kasper	Feb.	107
Mechanism for Obtaining Uniform Adjustment of Guide Rollers, L. Kasper	Oct.	154
Mechanism for Operating a Floating Jaw Vise, L. Kasper	Sept.	19
Mechanism for Operating a Sleeve Valve, Ball- and-socket	Dec.	254
Mechanism for Picking up and Transferring Thin Plates, M. Jacker	Feb.	107
Mechanism for Precision Measuring Instrument, Unique Amplifying	Feb.	127
Mechanism for Press, Variable-stroke Toggle-lever, Paul Grodzinski	Mar.	109
Mechanism for Reducing Oscillating Motion L. Kasper	Nov.	179
Mechanism for Transmitting Rotary and Linear Movements, Foot-operated, Frank Hartley	Mar.	109
Mechanism, Intermittent Gear, L. Kasper	July	195
Mechanism, Novel Intermittent Feeding, Paul Grodzinski	Jan.	151
Mechanism Simplified by Means of Universal Joints, Lever, Frank Hartley	Nov.	180
Mechanism, Variable-stroke, M. Jacker	Nov.	196
Mechanism, Variable-stroke Cam-actuated, A. B. Bassoff	July	152
Mechanism with Pivoted Holder for Cam Follower Rolls Provides Unusual Reciprocating Motion, L. Kasper	Jan.	104
Mechanism with Two-way Stop for Angular Move- ment of Shaft, J. L. Helminen	May	159
Mechanisms Designed for Filling Containers and Applying Covers	Apr.	20
Mechanism for Increasing Angular Movement of Shaft, Crank and Link, Paul Grodzinski	Sept.	170
Mechanite, Cast-to-form Dies and Punches Made from	Apr.	119
Mechanite Ram and Guide Plates, A 2000-ton Forging Press with Cast	June	119
Mechanite Research Institute of America, Inc.: Annual Meeting Held in Detroit	Dec.	273
Melaphone Corporation: Electronic Rectifier	Nov.	230
Rectifier for Operating Small Magnetic Chucks and Motors	Mar.	150
Meltomatic Paste Solder Simplifies Soldering and Tinning Operations	Apr.	170
Mending Tears in Tracing Paper, Donald A. Baker	May	114
Menough, Paul S., Personal of	Sept.	64-A
Mercury Clutch Corporation: Clutch Designed to Eliminate Shock	May	148
Merwin, Byron: The Application of Carbide Tools in a Machine Tool Plant	Aug.	105
Mesta Machine Co.: Huge Planer Installed by Erie Foundry Co.	Sept.	39
Metal Exposition, Some of the Exhibits at the National	Nov.	194
Metal Parts Impregnated with Graphite to Reduce Abrasion	Mar.	139
Metal, Sheet, see Sheet-metal		
Metal-working Machines Build Our Mechanized Ordnance, Modern, Colonel Norman S. Ramsey	Dec.	235
Metallurgy, Research in Powder	Feb.	122
"Metapost" Drafting Table	July	222
Metaseal 494-A Protective Coating for Metal Products	Jan.	175
Meter for Measuring Shaft Horsepower, New	Mar.	196
"Mett-Hub" Scratch Brushes	May	146
Meyer, E. F., Personal of	May	158
Michigan Tool Co.: "Cone" Worm-gear Speed Reducers	Sept.	55
Gear-finishing Machine of Wider Range	Oct.	107
Two-lap Gear-finishing Machines	Nov.	213
Cone Worm and Gear Hobbing Machine	July	230
"Micro-Nut" for Setting End-cutting Tools, Gair- ing Adjustable	Nov.	224
Micro Switch Corporation: Roller Lever Switch Actuator	Jan.	190
Switch with Die-cast Housing	Feb.	142
Limit Switch with Roller Actuator	Mar.	154
Small Explosion-proof Switch	Aug.	148
Microflex Reset Counter for Machine Controls	Nov.	228
Micromatic Home Corporation: Hydrohoner for Performing Internal and Ex- ternal Honing Operations	Oct.	119
Micrometer Attachment for Measuring Coil Springs, H. Moore	Aug.	112
Micrometer Faces, Optical Parallels for Checking, Nov.	224	
Micrometers, "International" Inside	Apr.	181
Micrometers, Lufkin Inside	June	164
Microscopes, Spencer Stereoscopic	July	224
Microscope to Facilitate Accurate Machine Work, Using, Arthur Baker	Mar.	129
Midway Machine Co.: "Millmaster" Vertical Milling Machines	Aug.	137
Mid-West Abrasive Co.: New Stone for Superfinishing and High-speed Honing	July	222
Milburn Co.: "Ply" Industrial Skin Protection	July	238
Mill, see also End-mill, Hollow Mill, etc.		
Miller, David K., Personal of	Feb.	154
Miller Electric Mfg. Co.: Alternating-current Welders	Sept.	55
Miller, Fred J., Obituary of	Jan.	202
Miller, George C., Personal of	June	172
Miller, Jr., John, Obituary of	Nov.	234-A
Miller Mfg. Co.: "Wonder Weld" Heat-resisting Compound	Sept.	61
Milling and Die-sinking Machine, Reed-Prentice Back-gearied Vertical	Apr.	183
Milling and Shaving Machines Built by the Na- tional Broach & Machine Co.	Oct.	110
Milling Attachment, Rusnak Motor-driven	Dec.	284
Milling Beveled Work, Fixture for Use in Roger C. Dickey	Mar.	111
Milling Cutters, see Cutters		
Milling Fixture for Cutting Irregular Shapes, L. Kasper	July	200
Milling Fixture, Indexing	Aug.	118
Milling Head for Lathes, Willard	Apr.	181
Milling Machine and Jig Borer, Combination Ver- tical	June	161
Milling Machine, Cherrying Attachment for	Aug.	142
Milling Machine, Cincinnati Hypro Planer Type		
Milling Machine, Counter Semi-automatic Hob Thread	Apr.	177
Milling Machine Designed to Handle Long Work, Kent-Owens	Apr.	182
Milling Machine for Small Parts, Automatic	Oct.	140
Milling Machine, Frew Duplex Hand	Oct.	133
Milling Machine, Hardinge Precision Tool-room		
Milling Machine, High-speed Vertical Profiler and Mixer	May	138
Milling Machine, Kent-Owens Hydraulic	Oct.	139
Milling Machine, Knight High-speed Vertical	Oct.	87
Milling Machine, Van Norman Hand	Sept.	59
Milling Machine, Van Norman Light	Nov.	216
Milling Machine, Work-locating Mechanism for M. Jacker	Sept.	20
Milling Machines, B & S Electrically Controlled	June	150
Milling Machines Brought Out by the Cincinnati Milling Machine Co., New	Oct.	81
Milling Machines, Cincinnati Dial Type	May	135
Milling Machines, Giddings & Lewis Horizontal Boring, Drilling and	Oct.	69
Milling Machines, Kearney & Trecker	Oct.	99
Milling Machines, Kent-Owens Double-spindle	Aug.	136
Milling Machines, Lucas New Model Large Size Horizontal Boring, Drilling, and	Oct.	89
Milling Machines, "Millmaster" Vertical	Aug.	137
Milling Machines, Sundstrand Hydro-Screw and Production	Oct.	134
Milling Machines, Van Norman Ram Type Uni- versal	Oct.	112
Milling Operations, Motion Picture Showing Tool and Die	Aug.	99
Milling, Quick-acting Fixture for Notch, T. Coyle	July	198
Milling with Automatic Duplicator Control, Pro- duction Contour	June	167
Mill-N-Shaver, Newton Straight-line	Oct.	123
Minarik, R. G.: Electronic Indicator for Use in Making Acc- urate Measurements	Mar.	133
Minster Machine Co.: Hornung and Wiring Presses	Oct.	141
Knuckle-joint Embossing Press	Jan.	183
"Minute Man" Blueprint Machine	Nov.	230
Mitchell, William R., Obituary of	June	176
"Modern" Ball-bearing Motor Drives	June	162
Modern Collet & Machine Co.: "Steeltest" Hardness Tester	Dec.	286
Moir, R. B., Personal of	Nov.	234
Molding Machine, Stokes Automatic Plastics	Sept.	58
Molding Machines, Watson-Stillman Hydraulic Compression and Injection	Apr.	179
Molding Press, Hannifin Plastic	Mar.	146
Molding Press, Twenty-ton Plastics	Dec.	280
Molding Press, Vertical Type Injection	June	155
Molding Presses, H-P-M Fastraverse and Injection	Oct.	130
Moldings, Delta Shaper for Forming	Dec.	292
Moldings, Hydraulic Unit for Punching and Coun- tersinking Holes in Window-trim	Jan.	185
Molds in the General Electric Plastics Depart- ment, Hobbing, Charles O. Herb	Feb.	87
Moline Tool Co.: Precision Boring Machine	Jan.	186
Boring Machine with Hydraulically Operated Table and Spindle Carriage	Aug.	137
Molybdenum-nickel Electroplating Process, A New	Aug.	222
Molybdenum Plate for High-temperature Service	Dec.	275
Stainless-steel Clad Carbon	July	101
Molybdenum Steels for High-speed Locomotive Service	July	275
Monarch Machine Tool Co.: New Lathes Developed by Company	Oct.	76
Specially Designed Cabinets that Serve as De- livery Trucks and Storage Bins	Jan.	194
Study Courses for Trained Shop Men	June	108
Moore, H.: Auxiliary Arbor Press Table	Sept.	32
Micrometer Attachment for Measuring Coil Springs	Aug.	112
Moore Special Tool Co., Inc.: Channel-lubricated Roller Chain	Nov.	232
Morse Twist Drill & Machine Co.: Machining Chrome-nickel-molybdenum Steels of High Tensile Strength	July	208
Morton, Allen W., Personal of	Aug.	152
Moslo Machinery, Inc.: "Shiftweight" Wire Reel	Feb.	146
Motion Picture Available to Prevent Industrial Eye Accidents, Sound	Aug.	111
Motion Picture on Steel Making, New Industrial	May	129
Morse Chain Co.: Machine Lubricant	Aug.	99
Motion Picture Showing Tool and Die Milling Operations	Aug.	168
Motion Picture, Westinghouse Semi-industrial	Nov.	212
Motion Pictures, Trade Training by	July	294
Motor, "Adjusto-Speed" Alternating-current	Dec.	136
Motor Base Provided with Spring Tension	Oct.	136
Motor Designed to Furnish Alternating Current, Direct-current	Mar.	151
Motor Drive, "Modern" Ball-bearing	June	162
Motor, Fractional-horsepower Ball-bearing	May	147
Motor-generator Sets Pyramid-mounted	Feb.	140
Motor, Much Smaller than Standard Type, "Fiber- glas"-insulated	Dec.	274
Motor, Oil-lubricated Explosion-proof	June	159
Motor, Pyramidal-base	July	228
Motor Unit, Dumore Double-reduction Geared Nov.	224	
Motors After an Extended Shut-down, Cleaning and Starting Electric	Oct.	160-H
Motors, Barber-Colman Geared-head	Feb.	146
Motors, Rectifier for Operating Small Magnetic Chucks and	Mar.	150
Motors, Reliance Explosion-proof	Dec.	294
Motorizing Machine Tools, "Drive-All" Unit for	Sept.	54
Mudge, Dr. William A., Personal of	Feb.	154
Multi-Auto-Matic, Bullard "Cut Master" Vertical Turret Lathe and	Oct.	98
Multi-Hydramatic Welding & Mfg. Co.: Fabricating by Welding Saves Time	Feb.	129
"Multipurpose" Grinding Machine and Improved Cylindrical Grinding Machines, Norton	Jan.	181
Munro, James R.: Machine Tools in the Tractor Industry	Oct.	126
Murphy, Deane, Personal of	July	234
Murphy, Louis E., Obituary of	Aug.	156
Murray, A. F.: Universal Stock Support for Punch Presses	May	120
Museum, The Industrial, John W. Higgins	Sept.	14
N		
Nagle, Lawrence V., Personal of	June	169
National Acme Co.: Thirty-ton Chucking Automatic and Snap-Lock Limit Switch	Oct.	88
Up-to-date Heat-treating Practice	Nov.	174
"Double-Duty" Threading and Turning Tools	June	161
National Association of Manufacturers: Inventors to be Honored by Manufacturers	Dec.	247
Modern Pioneer Awards to be Presented in February	Feb.	126
National Broach & Machine Co.: "Red Ring" Gear-shaving Machine Equipped for Crowning Gear Teeth	Sept.	53
RotoMill and RotoShaving Machine	Oct.	110
Heavy-duty "Red Ring" Gear Shaving Ma- chine	Apr.	176
Two-spindle "Red Ring" Profiling Machine	Aug.	135
National Cylinder Gas Co.: Portable Oxy-acetylene Cutting Machine	Oct.	143
National Machine Tool Builders' Association: Annual Meeting Held in Cleveland	Nov.	204
National Machinery Co.: Simplified Air-cooled Clutch for Heavy-duty Work	Apr.	183
National Metal Trades Association: Metal Trades Convention Discusses Employer- Employee Relations	June	138
National Safety Device Co.: Small Steel-treating and General-utility Furnace	Aug.	149
Nautical Training Course for Young Men	June	166
Navy, Selling Machine Tools to the U. S. Rear Admiral H. G. Bowen	Oct.	108
Nelson, Arvid: Outstanding Methods Produce Hamilton Stand- ard Propellers	July	152
Neoprene Garments for Industrial Workers	Jan.	180
New Britain Machine Co.: Automatic Screw Machine and Chucking Ma- chine	Oct.	106
New Departure Division General Motors Corpora- tion: Treadle Rolls	Aug.	149
New Method Steel Stamp Co.: Universal Marking Device for Round Shafts	Jan.	191
Marking Device for Gears and Bushings	May	145
New Wrinkle, Inc.: New Method for Finishing Castings	Dec.	242
New York Tool Co., Inc.: High-speed Vertical Profiler and Milling Ma- chine	May	139
Newhouse, R. C., Personal of	Mar.	160
Newman, S. F., Personal of	June	174
Newton Straight-line Mill-N-Shaver	Oct.	123
Niagara Machine & Tool Works: Power Squaring Shears	Mar.	148
Nibbler for Cutting Sheet Metal, Thor Portable Electric	Feb.	146
Nibbling Machines, Savage	June	153
Nichols, R. B., Personal of	Oct.	160-J
Nickel-alloy Iron Used for Airplane-engine Cast- ings	June	144
Nickel and Chromium Bonded to Aluminum Sheet	Mar.	138
Nickel-chromium-molybdenum Steel Shafts Used on Industrial Trucks	Mar.	139
Nickel in Heat-treating Equipment, Value of	July	206
Nickel Parts, Paste for Restoring Brightness of Tarnished	Dec.	256
Nickel Steels, Some Advantages of 3 1/2 Per Cent	Aug.	128
Nielsen Tool & Die Co.: Time Saver Lathe	Oct.	122
Nitrate Baths for Heat-treatment, Electric Heat- ing of Large	Apr.	182
Ni-hard for Wear-resisting Rings	Aug.	143
Niles-Bement-Pond Co.: Selling Machine Tools in South America	Jan.	132
Niles Tool Works Division, General Machinery Corporation: "Time Saver" Lathe	Oct.	122
Nitrate Baths for Heat-treatment, Electric Heat- ing of Large	Apr.	182
Noble & Westbrook Mfg. Co.: Power-operated Marking Machine	Nov.	223
Rapid Precision Marking Machine	Apr.	182
"No-Kik" Welding Cable	Apr.	180
Non-slip Pulley Covering	May	130
Pulley Covering Which Prevents Belt Slippage	May	130
Noorduyn Aircraft, Ltd.: Dies of Alloy Iron Form Airplane Parts	May	130
Norma-Hoffmann Bearings Corporation: Extra-light Ball Bearings	Oct.	146
Small Size Precision Ball Bearings with Re- tainers	Apr.	190

North American Aviation, Inc.: Military Planes by Real Production Methods	July 178	Partridge, S. D., Personal of Paste for Locating High Spots when Scraping Bearing Surfaces, Blue	Mar. 158 May 149	Correcting Automobile Connecting-rods for Weight and Center of Gravity	June 168
Northrup, Edwin F., Obituary of	June 176	Paste for Restoring Brightness of Tarnished Nickel Parts	Dec. 256	Comfortable Working Conditions under New Assembly Line	Aug. 104
Norton Co.: Latest Types of Grinding and Lapping Machines	Oct. 100	Patent Legislation, The Proposed Revision of Our Present	Sept. 18	Force-Tite—A New Paint that is Waterproof	Mar. 138
Tool and Cutter Grinding Machine with Anti-friction Table	Nov. 214	Patent Rights, A Precaution in Buying	Sept. 41	Porritt, Stanley: Lathe Attachment for Machining Spherical Seats of Special Valves	Aug. 116
"Multipurpose" Grinding Machine and Improved Cylindrical Grinding Machines	Jan. 181	Patents, New Book on	Nov. 208	Portable Air Tools for Aircraft Industry	July 228
Notch-milling, Quick-acting Fixture for	Roy T. Doyle	Patrick, L.: Cast Versus Welded Press Construction	May 95	Porter-Cable Machine Co.: Abrasive-belt Grinding Machine	Apr. 183
Notch-milling, Quick-acting Fixture for	Roy T. Doyle	Pecker, Joseph S., Personal of	Mar. 154	Porter, J. Roy, Personal of	June 169
Nozzles Designed for Oxy-acetylene Gouging, Ox-weld	Jan. 191	Pelkus, Leo C., Personal of	Feb. 154	Portman Machine Co.: Multiple-diameter Lathe Stop	Jan. 194
Nozzles for Precision Oxy-acetylene Cutting, Ox-weld	Dec. 292	Pennman, J. Russell, Personal of	Aug. 154	"Port-O-Flush" Bearing Flushing and Oiling Device	June 164
Numbering Graduated Circles, Unusual Set-up for	O. S. Marshall	Petermann Automatic Screw Machine	Apr. 185	Post Co., Frederick: Transparent Medium that Serves as Tracing Cloth	June 156
Nut, Boots Self-locking	May 149	Peterson, D. C., Personal of	Feb. 152	"Metapost" Drafting Tables	July 222
Nuts, Elastic Stop	Jan. 191	Peterson, Edward L.: Clamping Fixture for Holding Work while	Nov. 189	Potter & Johnston Machine Co.: Automatics in a French Airplane Factory	July 182
Nutt, Arthur, Personal of	Feb. 154	Grinding Center Hole	June 131	Potter, Dean A. A., Personal of	Aug. 152
O		Fixture Designed for Use in Sawing Off Conneeting-rod Caps	Mar. 158	Powder Metallurgy, Research in	Feb. 122
Oakite Products, Inc.: Solution Cutting Oil	Oct. 105	Phelps, L. E., Personal of	Mar. 160	Powdered Metal Produces Steel Parts of High Quality	Aug. 128
O'Brien, J. H., Personal of	Sept. 63	Phoenix Machine Co.: Radius Turning Tool for Machining Recess in Aluminum Casting	Dec. 273	"Power Flow" Planer with Centralized Control, Sellers	Nov. 215
Ohio Crankshaft Co.: Tocco Hardening Adopted for Jacobs Chucks	Nov. 202	Die-casting Machine for Zinc, Aluminum, Brass, and Magnesium	Feb. 138	Power, Henry R.: Reducing the Cost of Polishing	Mar. 125
Ohio Gear Co.: Twenty-fifth Year in Business Completed	Apr. 169	Photo-electric Limit Switch	Jan. 189	"Power-Plus" Grinders, Rotor	Sept. 62
Ohio Nut & Bolt Co.: Welding Nuts, Bosses, and Brackets	July 219	Photo-electric Relays Pay for Themselves in One Day	Mar. 154	Power Unit, Ex-Cell-O Grinding Spindle and Hydraulic	Oct. 136
Oil Circulating System, Ball-bearing	June 164	Photo-electric Set, Low-priced Experimental	Apr. 175	Pratt & Whitney Aircraft Division of United Aircraft Corporation: Advanced Methods of Airplane-engine Building	July 174
Oil Flusher and Dispenser, Portable Pressure	June 164	Photo-electric Tube, see also Electric Eye	Jan. 189	Pratt & Whitney Division Niles-Bentley-Pond Co.: New Plant Opened at West Hartford, Conn.	Feb. 130
Oil-gage Plugs, Gits Gear-case	Sept. 56	Photoswitch, Inc.: Photo-electric Limit Switch	Jan. 141	Deep-hole Drill Sharpening Machine	July 215
Oil, Oakite Cutting	Oct. 105	Photo-Troller Relay, Westinghouse Type QR	Feb. 141	"Pilot" Cylindrical Plug Gages	Aug. 141
Oil Reclaimer, Hilco	Oct. 137	Picatinny Advances the Art of Making Ammunition, Colonel Edward M. Shinkle:	2	Precision Mechanical Laboratory: Low Melting Point Alloy Used in Work-holding Devices	Mar. 92
"Oil-Wedge" Sleeve Bearing, Multiple	June 142	Picklen—A New Material Used for Clean, Economical Acid Pickling	Nov. 172	Preis Engraving Machine Co., H. P.: Combination Engraving and Etching Machine	Jan. 189
Oils and Their Application, Cutting	Tracy B. Langdon	Pier Equipment Mfg. Co.: Spot-welding Machines	Dec. 288	New Master Copy Type for Engraving Machines	Apr. 186
Oils, Periodic Checking up of Cutting	W. F. Schaphorst	Piercing Machine, Multiple Hole	Dec. 291	Grinder for Single-slip Engraving Cutters	Aug. 144
Oiler for Die-set Leader Pins, Universal	Nov. 222	Pierson, William Dickson, Obituary of	Jan. 202	Preelector, Warner & Swasey Turret Lathe for Brass Work and	Oct. 111
Oiler, Trico Unbreakable Gravity-feed	Dec. 292	Ploch, William F.: Need for High-production Inspection Machines	May 151	Press and Die, Experimental, Vincent Waikus	June 129
Oilers, Trico Unbreakable Wick-feed	June 165	Pipe and Tube Connections, VibraSeal	Dec. 293	Press, Bliss Heavy-duty Trimming	May 136
Oilgear Co.: Four New Types of Broaching Machines	Oct. 86	Pipe and Tubing, Standards for	Sept. 39	Press Brake, Bliss	Oct. 112
Twin Horizontal Broaching Machine	June 149	Pipe-bending Machine, Wallace Hydraulic Ram Type	Nov. 216	Press Brake Built for Aircraft Industry	Huge
Propeller Twisting Machine	July 213	Pipe Lines in Plating Shops, Insulating Joints for	Jan. 164	Press Brake, Chicago Crankless Steel	Dec. 286
"Oil-ir" Air-line Lubricator	Jan. 192	Pipe Machine, Oster "Tom Thumb" Portable	Oct. 129	Press Brake Equipped to Handle a Wide Range of Work, Bliss	Aug. 140
Oldsmobile Front Fenders, Unique Practices in Producing	Charles O. Herb	Pipe-threader, Toledo Self-contained Ratchet	Aug. 149	Press Cams, Materials for Hydraulic	July 204
Oldsmobile's Sensational Drive, Producing	Charles O. Herb	Pipe-threading Machine, Stavens Automatic	Mar. 142	Press, Chambersburg Double-gearied Trimming	June 154
Oliver Instrument Co.: Templet Tool-bit Grinding Machine	Oct. 146	Pipes and Containers, Sealing Compound for Hydrocarbon	June 145	Press, Clearing 500-ton Hydraulic	Aug. 133
Tool and Cutter Grinding Machine	Feb. 146	Pipes and Fittings, Seamless, Rubber-lined	Aug. 101	Press Construction, Cast Versus Welded, I. Patrick	May 95
Optical Thread Tool Gage	Aug. 146	Pipes, Standardized Colors for	Jan. 196	Press, Denison Hydraulic Straightening and Forging	Mar. 150
Ordnance, Modern Shop Equipment Builds Our Mechanized	Colonel Norman S. Ramsey	Plaisted, George W., Personal of	Feb. 154	Press, Denison Knee Type Hydraulic	Aug. 138
Orthotest for Checking Gears, Zeiss	Oct. 142	Planer, G-E Variable-voltage Drive for	Dec. 283	Press Design, Cast Frame Versus Welded Construction in—A Comment, A. E. Gibson	Mar. 130
Oscillograph for Testing Vibration-absorption Properties of Rubber	Sept. 55	Planer, Gray "Maximum Service"	Oct. 131	Press Design, Changing from Welded to Cast Frame Construction in E. V. Crane	Jan. 159
Osgood, John L., Obituary of	Jan. 204	Planer Installed by Erie Foundry Co., Huge Mesta	Sept. 39	Press, Elmes Open-side Hydraulic	Apr. 178
"Tom Thumb" Portable Pipe Machine	Oct. 129	Planer with Centralized Control, Sellers "Power Flow"	Nov. 274	Press, Federal Dial-feed	June 158
Owen, Arthur: Wire Cutting and Forming Tools for the Shaper	Sept. 32	Planer with Power Flow	Nov. 215	Press, Feeding Devices, Littell Safety	Jan. 188
Owens-Corning Fiberglas Corporation: "Fiberglas"-insulated Motor Much Smaller than Standard Type	Oct. 274	Plastic Block Replaces Several Indicator Parts, Solid	Aug. 281	Press for Redrawing Cartridge Cases, Bliss Hydro-Dynamic	July 216
Oxwell Blowpipe Designed for Light Welding	Feb. 147	Plastic Tablet Preforming Machine, Kux-Lohner Die-casting Machines and	Jan. 187	Press, Giant Watson-Stillman Hydraulic Flanging	Feb. 142
"Oxwell MP-9" Portable Acetylene Generator	Sept. 59	Plastic with Unusually Smooth Finish, New High Impact	July 207	Press, Greenerd Straightening Blocks and 6-ton Hydraulic	Mar. 148
Oxwell Nozzles Designed for Oxy-acetylene Gouging	Jan. 191	Plastics Competition	July 238	Press, Greenerd 10-ton Hydraulic	Feb. 141
Oxwell Nozzles for Precision Oxy-acetylene Cutting	Dec. 292	Plastics Department, Hobbing Molds in the General Electric Charles O. Herb	Feb. 87	Press, Hamlin Hydraulic Forging	May 146
Oxy-acetylene Cutting Machine, Linde	Nov. 221	Plastics, Farrel-Birmingham Hydraulic Presses for Molding	May 146	Press, H-P-M Turret Type Cartridge-case Heading	Mar. 145
Oxy-acetylene Cutting Machine, Portable	Oct. 143	Plastics Industries, Remarkable Growth of	Nov. 195	Press, Lake Erie 150-ton Long-stroke Hydraulic	Aug. 144
Oxy-acetylene Welding, see Welding		Plastics Molding Press, Twenty-ton	Dec. 280	Press, Minster Embossing	Jan. 183
Ozalid Corporation: Automatic Whiteprint Machine	Apr. 176	Plastics, New Enamel Brings Color to Plain	Aug. 128	Press Motor by Suitable Control, Preventing Overloading of	Sept. 21
Eipro Portable Printer	May 148	Plastics, Visual Engineering Tests Made Possible by Plexiglass Transparent	July 175	Press, New Plastics	July 228
P		Plating Shops, Insulating Joints for Pipe Lines in Jan. 164		Press of 300-ton Capacity, Hydraulic Stretching	Sept. 52
Pacific Specialty Supply Co.: "International" Inside Micrometers	Apr. 181	Plexiglass Transparent Plastics, Visual Engineering Tests Made Possible by	Jan. 175	Press Operations in Producing Oldsmobile Front Fenders, Unique, Charles O. Herb	Aug. 83
Packaging Machinery Competition	Sept. 41	Pluramech—A New Steel Making Process	Mar. 123	Press, Punch, see Punch	
Packard Water-pump Bodies, Unique Tooling for	Apr. 133	"Ply" Industrial Skin Protection	July 238	Press, Table, Auxiliary Arbor, H. Moore	Sept. 32
Packing for Hold-down Clamp, Self-contained	M. Jacker	Polishing and Buffing Lathe, Rome	Feb. 148	Press, 250-ton H-P-M Fastraverse	May 137
Packing, "Lattice-Braid"	Dec. 262	Polishing and Buffing Lathe, Rome Heavy-duty Double-spindle	Aug. 144	Press, Variable-stroke Toggle-lever Mechanism for Paul Grodzinski	Mar. 109
Packings, New Lubricant Developed for	Apr. 169	Polishing and Buffing Lathes, Divine	June 153	Press with Inclinable Mounting, Bliss High-production	Jan. 184
Pad for Disk Sanders, Co-Ro-Felt	Mar. 153	Polishing and Buffing Machine, Roe	Nov. 192	Press with Locking Device for Assembling Operation, Arbor, Vincent Waikus	Sept. 40
Page, DeWitt, Obituary of	Apr. 202	Polishing Attachment, Flat	Nov. 225	Press with New Features, V & O Inclinable	Oct. 141
Paint that is Waterproof, Force-Tite—A New Mar. 138		Polishing Flat-iron Castings, Machining and, W. H. Tangeman	Sent.	Presses, Baldwin Southwick Multi-purpose	June 154
Paisley Products, Inc.: Protection for Stainless Steel During Storage and Shipping	Aug. 128	Polishing Lathe, Hanson-Van Winkle-Munning	Feb. 147	Presses, Clearing Crownless	Sept. 51
Pallet, Palmer-Shile Steel-armored Fork-truck	Apr. 190	Buffing and Reducing	Feb. 147	Presses for Forming Metal Aircraft Parts	July 217
Palmer, C. E. H., Personal of	Nov. 234-A	Reducing the Cost of	Henry R. Power	Presses for Molding Plastics, Farrel-Birmingham Hydraulic	May 146
Palmer-Shile Co.: Steel-armored Fork-truck Pallet	Apr. 190	James H. Rodgers	Mar.	Presses, H-P-M Fastraverse and Injection Molding	Oct. 130
Palmdgren Quick-change Safety Drill Chuck	Oct. 147	Polymatic High-speed Wire-forming and Cutting-off Machine	Aug. 142	Presses Introduced in a Variety of Types, Clearing Hydraulic	Oct. 68
Parallels and V-blocks for Magnetic Chucks, "Magne-Blox"	Apr. 190	Pomoloy Plain Gray Iron with Tensile Strength of 40,000 Pounds per Square Inch	Sept. 142	Presses, Minister Horing and Wiring	Oct. 141
Parallels for Checking Micrometer Faces, Optical Nov. 224		Pomoloy Pump Co.: Pomoloy Plain Gray Iron with Tensile Strength of 40,000 Pounds per Square Inch	Sept. 154	Presses of Enclosed Design, Bliss	Nov. 217
Paramount Engineering Co.: "Minute Man" Streamline Blueprint Machine	Nov. 230	Portee, Wallace L., Personal of	May 146	Presses, Performing Broaching Operations in Foot and Power, M. J. Goldstein	Aug. 98
Paramount Rubber Service, Inc.: Seamless Rubber-lined Pipes and Fittings	Aug. 101	Pontiac Motor Division of General Motors Corp.: New Production Equipment for 1940 Pontiacs	Apr. 146	Presses, Zeh & Hahnemann Double-crank	Feb. 140
Pardee, James T., Personal of	Apr. 196	Wins First	Oct. 151	Turret Type Tool-holder	Feb. 148
Park Sales Co.: Oxy-acetylene Welding Materials for Use at Low Temperatures	June 144			Prest-O-Weld Welding and Cutting Equipment of Improved Design	Nov. 212
Parker, Leo T.: Union Responsibility for Contracts	Feb. 122			Price, R. E.: New Hydraulic System Developed for a Small Grinding Machine	Nov. 182
What is a Bailment Sales Contract?	Mar. 115			Prince, David C., Personal of	May 154
Which Railroad is Responsible for Damage to Shipments?	June 136			Printer, Elpro Portable	May 148
When a Purchaser Refuses to Pay for Machinery that has been Delivered	July 204			Prize for Editorial Achievement, MACHINERY Wins First	Oct. 151
Parsons, Hayes, Personal of	May 151				

Prochner Safety Chuck Co.: Air-operated Tapping Machine	Oct. 144
Production Machinery Sales Co.: Verti-Hydra-Matic Chucking Machine	Mar. 145
Profile and Milling Machine, High-speed Vertical	May 139
Profiling Attachment for Vernon Vertical Mill and Jig Borer	July 226
Profiling Machine, Two-spindle "Red Ring"	Aug. 135
Progressive Welder Co.: Spot-welding Gun Equipped with Extension Handle	Nov. 220
Hydraulic Unit for Punching and Countersinking Holes in Window-trim Moldings	Jan. 185
Spot-welding Equipment for Assembling Automobile Garnish Molding	Mar. 149
"No-Kik" Welding Cable	Apr. 180
Hydraulic Cable Clamp for Spot-welding Gun	May 144
"Progress-O-Matic" High-speed Spot-welder	Aug. 138
Projection Comparator Assembled from Standard Optical Parts	July 218
Propeller Twisting Machine, Oilgear	July 213
Propellers, Outstanding Methods Produce Hamilton Standard	Arid Nelson July 152
Protection for Stainless Steel During Storage and Shipping	Aug. 128
Protection, Industrial Skin	July 233
Protect-O-Metal, a Compound for Use in Welding and Die-casting	Dec. 274
"Protect-O-Metal" for Preventing Spatter in Electric Welding Operations	June 160
P.T.M. Tracing Cloth	June 156
Pulley Covering which Prevents Belt Slippage, "Nonslip"	May 130
Pulleys for Right-angle Belt Drives, Adjustable Idler	Martin H. Ball July 205
Pump Bodies, Unique Tooling for Packard Water	Apr. 133
Pump for Small Machine Tools, Gusher Coolant	June 165
Pump, Racine Variable-volume Hydraulic	June 160
Pumps, Ruthman Gusher Coolant	Sept. 52
Pumps, Brown & Sharpe Rotary Geared	Dec. 291
Pumps Handling Corrosive Liquids, Stainless Steels Used for	Sept. 43
Pumps, Roper Rotary	Mar. 151
Pumps, Roper—Correction	Apr. 194
Pumps, Speedway Small-size	July 219
Punch and Spacing Table, Williams-White Beam	Nov. 219
Punch Presses, Pneumatic Counterbalancing Cylinders for	Feb. 143
Punch Presses, Universal Stock Support for, A. F. Murray	May 120
Punch, Wiedemann Motor-drive Turret	May 136
Punches in Punch Pad, Holding Small	Donald A. Baker Feb. 118
Punches, Nielsen Lay-out	Aug. 143
Punching and Countersinking Holes in Window-trim Moldings, Hydraulic Unit for	Jan. 185
Purifier Attachment for Grinding Machines, Air	Jan. 185
Purtell, Thomas M., Personal of	Feb. 154
Pyramil-tipped Mallets	July 224
Pyranol-filled Capacitors, General Electric	Dec. 281
Pyrometer Controller, Bristol Electronic	July 224
Pyrometer, Leeds & Northrup Optical	Nov. 224
Pyrometer, Leeds & Northrup Speedomax	Apr. 176
Pyrometer, Wheelco Surface Temperature	Dec. 292
Q	
Quality Hardware & Machine Co.: Ball-bearing Motor Drives	June 162
Quenching Carbon Steel, Calcium-Chloride Brine for	Sept. 26
R	
Racine Tool & Machine Co.: Shear-cut Production Saws	Oct. 71
Variable-volume Hydraulic Pump	June 160
Radius-forming Attachment for Cutter Grinder	John W. Gerdel July 198
Radius-forming Tools, Forest City	Mar. 152
Radius Turning Tool for Machining Recess in Aluminum Casting	Dec. 273
Railroad is Responsible for Damage to Shipments?	Which Leo T. Parker June 136
Railroads into Bankruptcy, Taxing the	Aug. 107
Railroads, Tax Burden of the	Dec. 191
Railways, Effect of Automobile and Bus Transportation on	Jan. 180
Ramsey, Colonel Norman S.: Modern Shop Equipment Builds Our Mechanized Ordnance	Dec. 235
Rapid Electroplating Process: New Process for Applying Silver Coatings	June 119
Rasmussen Machine Co., Inc.: "Sawmore" Metal-cutting Machine	Oct. 143
Rasp, John H., Personal of	Mar. 160
Raterman, J. A., Personal of	Apr. 198
"Ratiomotor," Boston Gear Straight-in-line	Sept. 58
Reaming Machine, LeMaire Two-way Horizontal Drilling, Boring and	Apr. 190
Reciprocating Motion for Link-supported Ram, Straight-line	J. L. Helminen Aug. 103
Reciprocating Motion, Pivoted Holder for Cam Follower Rolls Provides Unusual	L. Kasper Jan. 152
Reciprocating Tool, H & H Multi-purpose	July 222
Reclaimer, Hileo Oil	Oct. 137
Recorder, General Electric Weld	Jan. 192
Recording Equipment, Leeds & Northrup High-speed Temperature	Apr. 176
Rectifier for Operating Small Magnetic Chucks and Motors	Mar. 159
Rectifier, Megaphone Electronic	Nov. 230
"Red Ring" Gear-shaving Machine Equipped for Crowning Gear Teeth	Sept. 53
"Red Ring" Gear-shaving Machine, Heavy-duty	Apr. 176
"Red Ring" Profiling Machine, Two-spindle	Aug. 135
Red Star Products Co.: Fabrication by Arc Welding Often Requires Redesign of Parts	Feb. 102
"Red Tiger" Tool Steel	June 166
Redin Floor Type Sensitive Drilling Machine	Nov. 215
Reducer, Speed, see Speed	Reducer, Speed, see Speed
Reed, Philip D., Personal of	Dec. 297
Reed-Prentice Corporation: Keyseating Machine	Dec. 285
Cherrying Attachment on Vertical Miller and Die-sinker, and Jig Borer Used to Finish Bores in Fixture	Jan. 164
Back-gear Vertical Milling and Die-sinking Machine	Apr. 183
Duplicator Mounted on 3VS Vertical Milling Machine	May 150
Reel for Coils up to 4000 Pounds, Littell	Oct. 139
Reel, Mosil "Shiftweight" Wire	Feb. 146
Reel, Simplex Automatic Stock	Feb. 149
Reels for Handling Light-gage Coils, Littell Motor-driven	Nov. 223
Reese, D. J., Personal of	Nov. 234-A
Reeves Pulley Co.: "Special" Handwheel	Aug. 146
Relutron Corporation: Low-priced Experimental Photo-electric Set	Apr. 174
Reibig, Eric A.: Micrometer Groove Gage	Dec. 264
Relays Pay for Themselves in One Day, Photo-electric	Mar. 154
Reliance Electric & Engineering Co.: Cleaning and Starting Electric Motors After an Extended Shut-down	Oct. 160-H
Explosion-proof Motors	Dec. 294
Republic Steel Corporation: Facilities for Stainless Steel Production Expanded	Apr. 161
Research Means, What Industrial	June 103
Resistance Welding, see Welding	June 160
Reynolds, S. H., Personal of	Sept. 63
Richardson, A. L., Personal of	July 236
Richardson, William H., Personal of	Apr. 198
Rickert-Shafer Co.: Collapsible Tap Designed to Facilitate Rapid Set-up	Oct. 145
Motor-driven Threading Machine	Mar. 158
Ridgway, Raymond R., Personal of	Mar. 158
Rifles, Planning for Quantity Production of Johnson Semi-automatic	C. B. Gardner Jan. 160
Rifles, Springfield Armory Tools Up for New Semi-automatic	Colonel Gilbert H. Stewart May 90
Rigidmild, Sundstrand Hydro-Screw	Oct. 134
Rivet-setter, Chicago Automatic	Oct. 147
Rivet-setter with Solenoid-operated Movable Anvil, Multiple	Oct. 160-F
Riveter, Hanna High-speed Pneumatic	Sept. 56
Riveting Hammer, Light-weight	Apr. 186
Riveting Machine, Hanna Electric-hydraulic	Nov. 218
Riveting Machine Operated by Compressed Air, Automatic Sheet-metal	Paul Grodzinski Dec. 253
Rivett Lathe & Grinder, Inc.: Screw-cutting and Precision Bench Lathes	Oct. 101
Robbins Engineering Co.: Non-magnetic Sine Plate	Dec. 295
Robertson, F. L., Personal of	June 172
Robins, Paul N., Personal of	June 172
Robinson, Ernest Leffert, Personal of	July 234
Robinson, O. P., Personal of	July 236
Robot Machinery Co.: Surface Grinding Machine	Feb. 142
Rock Island Arsenal: Modern Shop Equipment Builds Our Mechanized Ordnance	Dec. 235
Rock River Valley Engineering Council: Engineering Conference Held in Rockford	Nov. 184
Rock-Tred Co., Inc.: Tred-Seal—A New Waterproofing and Crack-filling Material for Floors	Aug. 128
Rockford Machine Tool Co.: Twelve-inch Hydralic Vertical Shaper	Oct. 131
Rockwell-Bristol Dilatometer	Apr. 186
Rod, Haynes Hard-facing	Feb. 143
Rodgers, James H.: Inserted-blade Scraper for Catalin or Wood	Jan. 169
Holder for Special Buffing and Polishing Tips	Aug. 112
Roe Mfg. Co., Lewis: Polishing and Buffing Machine	Apr. 192
Rohm & Haas Co.: Visual Engineering Tests Made Possible by Plexiglass Transparent Plastics	Jan. 297
Roller Bearing, SKF Double-row Cylindrical	Oct. 296
Roller Bearings, Shafer Self-contained Double-row	Oct. 297
Rolls, New Departure Treadle	Aug. 149
Rolph, Henry D., Personal of	Dec. 297
Rome Machinery Sales & Engineering Co.: Model MOS Polishing and Buffing Lathe	Dec. 293
Model 2MIS Polishing and Buffing Lathe	Feb. 144
Heavy-duty Double-spindle Polishing and Buffing Lathe	Aug. 140
Roney, John S., Personal of	Aug. 152
Root Co., B. M.: Hydraulic Boring and Drilling Machine	Oct. 141
Roper Corporation, Geo. D.: Rotary Pumps	Mar. 151
Rotary Pumps—Correction	Apr. 194
Rosenlund, Victor: Quick-acting Jig Clamp	June 135
Ross Operating Valve Co.: All-air Pilot-controlled Valve for Air Cylinders	Dec. 291
Heavy-duty Air-control Valve	Jan. 192
Air Valve for Welding Equipment	Mar. 150
RotoMill and RotoShaving Machine Built by the National Broach & Machine Co.	Oct. 110
Rotor Tool Co.: "Power-Plus" Grinders	Sept. 118
Vertical Air Grinders	Jan. 148
Air-operated Die-grinders	Aug. 148
Rubber and Neoprene to Steel and Aluminum, Bonding	June 144
Rubber Developed by B. F. Goodrich Co., Synthetic	July 206
Rubber Flexible Coupling, Lord Bonded	Dec. 295
Rubber-lined Pipes and Fittings, Seamless	Aug. 101
Rubber, Oscillograph for Testing Vibration-absorption Properties of	Sept. 55
Rubber Parts, The Lubrication of	Sept. 26
Rugg, Walter S., Obituary of	June 178
Rumbel, Ralph M., Obituary of	Sept. 64-D
Rusnak Tool Works: Motor-driven Milling Attachment	Dec. 284
Russell Electric Co.: Fractional-horsepower Ball-bearing Motor	May 147
Russell, Holbrook & Henderson, Inc.: Petermann Automatic Screw Machine	Apr. 185
Russian Methods Developed Around American Machines	Jan. 138
Ruth, Chester W., Personal of	Dec. 298
Rutman Machinery Co.: Gusher Coolant Pump	Sept. 52
Gusher Coolant Pump for Small Machine Tools	June 165
Ryerson & Son, Inc., Joseph T.: Encouraging Clean Shop Departments by Good-natured Cleaning	Feb. 120
Open House Held at Chicago Plant	June 178
Ryerson, Jr., Edward L., Personal of	June 169
Safety Press Feeding Devices, Littell	Jan. 188
St. Clair, J. A., Personal of	June 169
St. Clair, Leo J.: Increasing the Life of Cutting Tools by an Improved Method of Grinding	Dec. 267
Sales Contract? What is a Bailment	Leo T. Parker May 119
Salisbury, Howard R., Personal of	Aug. 156
Salt Spray, Materials Artificially Aged by	Mar. 128
Sander, Max Disk	Aug. 140
Sander, Portable Electric	May 149
Sanders, Co-Ro-Felt Pad for Disk	Mar. 153
Sanding Machine, Portable Electric	June 162
Sauer, Jr., John, Personal of	Dec. 297
Sauvage Co., Paul C., Obituary of	Apr. 202
Savage Co., W. J.: Nibbling Machine	June 153
Saw for Pattern and Woodworking Shops, Radial	Mar. 146
Saw, Grob Metal Band	Aug. 139
Saw-sharpening Machine, Covel-Hanchett Precision	June 154
Saw, Skilsaw Electric Hand	May 147
Saw with New Work Feed "Super Doall"	Band
Saws, Atkins Curled-chip Metal-cutting	Aug. 141
Saws, Racine Shear-cut Production	Oct. 71
Sawing and Chain Filing Machine, Grob Band	Oct. 140
Sawing Off Connecting-rod Caps, Fixture Designed for Use in	Edward L. Peterson June 131
"Sawmore" Metal-cutting Machine	Rasmussen Oct. 143
Schacht, Elmer C., Personal of	Mar. 158
Schaefer, Frederick R., Personal of	May 154
Schaphorst, W. E.: Is Belts Slip, What's Talking About?	Feb. 121
Weight of Belting	Feb. 122
Should Belts be Cleared with Steam?	Mar. 115
Periodic Checking up of Cutting Oils	Mar. 124
Horsepower Capacity of Sloping and Vertical Belts	May 119
Schauer Machine Co.: "Ideal" Variable-speed Lathe for Bench Mounting	Sept. 59
Speed Lathes Equipped with Vacuum Chucks	May 141
Schellenbach, D. E., Personal of	July 232
Schermerhorn, H. L., Personal of	Sept. 63
Scherr Co., Inc., George: Tornos Automatic Screw Machine	Feb. 141
Chesterman 40-inch Height Gage	Feb. 143
"Magne-Blox" Parallels and V-blocks for Magnetic Chucks	Apr. 190
Universal "Magne-Blox" Angle-iron	Aug. 148
School Opened in California, Aircraft Metal	Mar. 131
School, see also Education, Apprentices, Training Vocational	
Schuman, Frank J., Personal of	June 172
Schwab, Charles M., Obituary of	Oct. 160-N
Scott, James Y., Personal of	Apr. 196
Scovill Mfg. Co.: Boots Self-locking Nut	May 149
Scrammire, Lawrence E., Personal of	May 156
Scrap Cutters Eliminate Trouble, Relocation of	Donald A. Baker July 203
Scraper for Catalin or Wood, Inserted-blade	James H. Rodgers Jan. 169
Scraping Bearing Surfaces, Blue Paste for Locating High Spots when	May 149
Screw-holding Driver	Sept. 61
Screw Machine and Chucking Machine, New Britain Automatic	Oct. 106
Screw Machine, Foster Improved Fastermatic and	Oct. 116
Screw Machine, Greener Six-spindle Automatic	Oct. 89
Screw Machine, Petermann Automatic	Apr. 185
Screw Machine, Tornos Automatic	Feb. 141
Screw Machine Work, Angle-gage for	Robert E. Hulse Jan. 167
Screw Machines, Brown & Sharpe Feeding Finger Adapters for Automatic	Feb. 146
Screw Machines, Improved Six-spindle Conomatic	Oct. 77
Screw Machines, see also Automatic	
Screw Machines, Thread Chasing Attachments for Brown & Sharpe Automatic	Nov. 219
Screw Thread, see Thread	
Screwdriver with Magazine Feed, Power	May 140
Seacord, A. W.: The Machine Tool Builder's Next Goal	Oct. 90
Sealing Compound for Hydrocarbon Pipes and Containers	June 145
Seagstrom, E. G.: Using Sewing Machine Needles in Drawing Ellipses of Various Sizes	July 203
Sebastian Lath Co.: Type S Tearable-head Lathes	Oct. 129
Security? What Price	May 122
Sellers & Co., Inc., William: "Power Flow" Planer with Centralized Control	Nov. 215
Service Machine Co.: "Semco" Hand Slitting Shear	Oct. 140
Seybold Division, Harris-Seybold-Potter Co.: Steel Stitching Machine	Dec. 281
Precision Knife-grinding Machine	Aug. 141
Shafer Bearing Corporation: Self-contained Double-row Roller Bearings	Apr. 187
Shaft Aligning Device, Adjustable	June 135
Shanks to Small Drills, Quick Method of Applying Large	Apr. 169
Shaper, Rockford 12-inch Vertical	Oct. 131
Shaper, Wire Cutting and Forming Tools for the Arthur Owen	Sept. 32

Shapers and Shears, Cincinnati	Oct. 119	Speed Control of Improved Design, Columbia	June 165	Sterling Motor-driven Drill Grinder	July 224	
Shapers, Gould & Eberhardt New Hobbing Machines and Improved	Oct. 94	Speed Increasers, Westinghouse	Dec. 293	Sterling Products Co.: Welders Equipped with Remote Control	Sept. 54	
Shapers with Improved Features, Cincinnati Rapid-traverse	Apr. 178	Speed Indicator, Velox	Mar. 152	Stewart, Colonel Gilbert H.: Springfield Armory Tools Up for New Semi-automatic Rifles	May 90	
Sharpening Machine, Barber-Colman Automatic Hob	Apr. 175	Speed Reducer, Abart	July 226	Stewart, Sidney A., Personal of	July 232	
Sharpening Machine, Covel-Hanchett Precision Saw	June 154	Speed Reducer, Boston Gear Straight-in-line Motorized	Sept. 58	Sticht & Co., Herman H.: Velox Speed Indicator	Mar. 152	
Sharpening Machine, Pratt & Whitney Deep-hole Drill	July 215	Speed Reducer, Brad-Foote	May 146	Stitching Machine, Seybold-Morrison Steel	Dec. 281	
Shaving Machine, Heavy-duty "Red Ring" Gear	Apr. 176	Speed Reducer, Smith	Oct. 147	Stock Support for Punch Presses, Universal A. F. Murray	May 120	
Shaving Machine, Newton Straight-line Milling and	Oct. 123	Speed Reducers, "Cone" Worm-gear	Sept. 55	Stoddard, J. M., Personal of	April 198	
Shaving Machines Built by the National Broach & Machine Co., Milling and	Oct. 110	Speed Reducers, Jones Worm-helical	Oct. 138	Stokes Machine Co., F. J.: Automatic Plastics Molding Machine	Sept. 58	
Shaw-Box Crane & Hoist Division of Manning, Maxwell & Moore, Inc.: Load Lifter Jr. Electric Hoists	Apr. 184	Speed Transmission, Infinitely Variable	Oct. 101	Stoll, Clarence G., Personal of	Jan. 197	
Shave Insulator Co.: New Plastics Press	July 228	Speed Transmission, Lenny Variable	May 145	Stop, Portman Multiple-diameter Lathe	Jan. 194	
Shear, Cincinnati All-steel	June 156	Speed Transmission, Sundstrand Oil-power Variable	Oct. 134	Stout, Russell H.: Change-gears for Helical-gear Hobbing	Mar. 134	
Shear, Power-controlled Back-gage for Cincinnati "All Steel"	Nov. 230	Speedway Mfg. Co.: Portable Hand Grinder	Dec. 293	Stow Mfg. Co., Inc.: Combination Flexible-shaft Machine	Sept. 56	
Shear, "Semeo" Hand Slitting	Oct. 140	Small-size Pumps	July 219	Multi-speed Flexible-shaft Machines	Oct. 137	
Shears, Cincinnati Shapers and	Oct. 119	Spencer Lens Co.: Stereoscopic Microscopes	July 224	Truck-mounted Flexible-shaft Machine	May 145	
Shears, Niagara Power Squaring	Mar. 148	Spencer, W. H., Personal of	Oct. 160-K	Angle-head for Close-corner Drilling	Aug. 145	
Sheet-metal Cutting Machine, Crescent Portable	July 222	Spherical Seats of Special Valves, Lathe Attachment for Machining	Stanley Porritt	Straightener, Henry & Wright 25-ton Dieing Machine and Stock	Oct. 134	
Sheet-metal Operations in an Airplane Plant	Dec. 240	Spicer, Clarence W., Obituary of	Jan. 202	Straightening and Forcing Press, Denison Hydraulic	Mar. 150	
Sheet-steel Lifter, Cullen-Friestd	Mar. 149	Spider Webs in Industry	Sept. 62	Straightening Blocks and 6-ton Hydraulic Press, Greenfield	Mar. 148	
Sheets for Various Applications, Silver-Ply Stainless-clad	May 130	Spindle and Hydraulic Power Unit, Ex-Cell-O Grinding	Oct. 136	Straightening Machines, Ajax Continuous Cold-drawing and	Oct. 116	
Sheets, Hastelloy Corrosion-resistant Alloy-steel	Apr. 179	Spinning Fixture for Assembling Die-castings	Nov. 190	Straightening Press, Lake Erie Hydraulic	May 143	
Shell-centering Machine, LeMaire	Jan. 189	Splices, Standard Approved for Involute	Mar. 94	Straightening Presses, Denison Hydraulic Broaching, Assembling, and	Nov. 225	
Shell Forgings by the Extrusion Process, The Manufacture of	May 96	Spot-welding, see Welding		Strand, N. A., Obituary of	May 160	
Shells, Landmaco Threading Machine Equipped for Tapping	Apr. 89	Spring Checker for Compression Springs	Dec. 294	"Strang-Hold"—A High-strength Waterproof Adhesive for Joining Metals	Apr. 171	
Shells, Latest Practice in Forging	Charles O. Herb	Springs Made to Meet Precision Requirements	Sept. 43	Strauchan, D.: Producing Precision Gears in a Machine Tool Plant	Sept. 9	
Sherwin-Williams Co.: New Enamel Brings Color to Plain Plastics	Aug. 128	Beryllium-copper		Stretching Press of 300-ton Capacity, Hydraulic	Sept. 52	
"Shiftweight" Wire Reel, Moslo	Feb. 146	Springs, Micrometer Attachment for Measuring Coil	H. Moore	Stripper with Vacuum Collector, Wire Insulation	Jan. 191	
Shinkle, Colonel Edward M.: Picatinny Advances the Art of Making Ammunition:	2	Springfield Armory Tools Up for New Semi-automatic Rifles, Colonel Gilbert H. Stewart	May 90	Strompl, George A.: Douglas Builds the World's Largest Airplane	July 146	
Shipments? Which Railroad is Responsible for Damage to Leo T. Parker	June 172	Spur-welding, see Welding		Strouse, H. S., Personal of	June 169	
Shirring, Francis Joseph, Obituary of	Feb. 136	Springs Made to Meet Precision Requirements	Dec. 294	Stuart Oil Co., Ltd., D. A.: Cutting Oils and Their Application	Mar. 93	
Shirley, George F., Obituary of	Sept. 64-D	Beryllium-copper		Studebaker's Modernized Plant, Operations in, Apr. 116		
Shop Departments by Good-natured Chiding, Encouraging Clean	May 158	Springs, Micrometer Attachment for Measuring Coil	H. Moore	Sturdy Tool & Engineering Co.: Energizer for Magnetic Chucks	Apr. 185	
Shop Men, Monroe Study Courses for Trained	Feb. 120	Springfield Armory Tools Up for New Semi-automatic Rifles, Colonel Gilbert H. Stewart	May 90	Sundstrand Machine Tool Co.: Automatic Stub Lathes Now Built in Three Models	Sept. 48	
D. H. McKellar	June 108	Springfield, Oliver C., Personal of	Nov. 234-A	Hydro-Screw and Production Rigidmills and Oil-power Variable-speed Transmission	Oct. 134	
Show Held by Machine Tool Builders, Individual	Nov. 208	Sreenan, J. H.: Lockheed Builds Planes for Commerce and Defense		Sunnen Products Co.: Mandrel Adapter for Precision Honing Machine	Oct. 160-H	
Shute, Henry D., Obituary of	Sept. 64-D	Stainless-clad Sheets for Various Applications, Silver-Ply	May 140	"Super Doall" with New Work Feed	July 216	
Sidney Machine Tool Co.: Lathes with 14- to 36-inch Swing	Oct. 123	Stainless-clad Steel, New Method of Welding	Oct. 130	"Super Regal" Lathe, LeBlond	Oct. 117	
Silver Brazing Alloy Used on Heavy Current Conductors, Low-temperature	Mar. 139	Stainless Sheet Steel, New Process for Producing	Oct. 160-F	"Super Safety" Balancer	Oct. 160-D	
Silver Coatings, New Process for Applying	June 119	Stainless-steel Clad Carbon-molybdenum Plate for High-temperature Service	Dec. 275	Superfinishing and High-speed Honing, New Stone for	July 222	
Silver-Ply Stainless-clad Sheets for Various Applications	May 130	Stainless Steel During Storage and Shipping, Protection for	Aug. 128	Superfinishing Machine, Foster Brake-drum	Sept. 49	
"Simpact" Self-contained Ratchet Pipe-threader	Aug. 149	Stainless-steel "Lumber" for the Construction Field	Apr. 171	Superalloy Corporation: Tubing Connectors	Dec. 295	
Simplex Automatic Stock Reel	Feb. 149	Stainless Steel Production, Republic Steel Expands Facilities for	Apr. 161	Supplies, The Best Machine Deserves the Best in		
Simplex Ball-bearing Units for Machine Applications	Feb. 148	Stainless Steel Saved in Manufacturing Costs, Where	Aug. 112	Support, Dumore Mounted-wheel Shank	Mar. 148	
Simplex Vises for Welding and Production Operations	Sept. 59	Stainless Steels Available in the Form of Castings, Silver-bearing	July 207	Support for Punch Presses, Universal Stock, A. F. Murray	May 120	
Simplified Pattern for Files and Rasps	May 128	Stainless Steels used for Pumps Handling Corrosive Liquids	Sept. 43	Supports with Kennametal Inserts, Work	May 147	
Simpson, C. W., Personal of	July 234	"Stainweld D" Electrode, Lincoln	Mar. 145	Surface Analyzer for Determining Smoothness of Finished Surfaces, Brush	Apr. 180	
Sime Plate, Robbins Non-magnetic	Dec. 295	Stamets, William K.: Automatic Pipe-threading Machine	May 142	Surface Combustion Corporation: Radically New Method of Annealing Wire Reduces Costs and Increases Output	Dec. 272	
"Sinterloy" Powdered Metal Produces Steel Parts of High Quality	Aug. 128	Stamping Machine, Adjustable Gold-stand, Esco Portable Tool	July 219	Surface Finishing, Future Trends in Equipment for	David A. Wallace	Oct. 120
S K F Industries, Inc.: Double-row Cylindrical Roller Bearing	Oct. 136	Standard Approved for Involute Splines	Mar. 94	Surface Indicator Showing Variations in Thickness of a Millionth Inch	Sept. 16	
Skilwash, Inc.: Electric Hand Saw	May 147	Standard Carbide-tipped Tools, Wesson	Apr. 164	Surface-plate Equipment, Challenge	Mar. 153	
Slayer, Games, Personal of	June 174	Standard Electrical Tool Co.: Speed Lathe with Foot-pedal Control	June 160	Swanson, Harry J., Personal of	July 232	
Slezak, John, Personal of	July 232	Standard for Engineering and Scientific Graphs, Proposed	Apr. 169	Swanton, Harold, Personal of	Feb. 152	
Smith & Sons, G. W.: Protect-O-Metal, a Compound for Use in Welding and Die-casting	Dec. 274	Standard Machinery Co.: Twenty-ton Plastic Molding Press	Dec. 280	Swedish Gage Co. of America: Unique Amplifying Mechanism for Precision Measuring Instrument	Feb. 127	
"Protect-O-Metal No. 2" for Preventing Spatter in Electric Welding Operations	June 160	Standard of Living, How to Lower the	June 168	Switch Actuator, Micro	Jan. 190	
Smith, George A., Personal of	Apr. 196	Standard Tools are Breaking Production Bottlenecks	William J. Burger	Switch, General Electric Plugging	Apr. 178	
Smith, Inc., Winfield H.: Differential Speed Reducer	Oct. 147	Steadyrest, Made from Hard Wood Block, Improvised, J. W. Herriman	June 135	Switch, Line Starter, and Vibrometer, Westinghouse Heavy Limit	Oct. 110	
Smith Tool & Mfg. Co., R. G.: "All Purpose" Toolpost Grinder	Sept. 61	Steel, see also Sheet, Stainless, High-speed, etc.	Steel and Aluminum, Bonding Rubber and Neoprene to	Switch, National Acme Snap-Lock Limit	Oct. 88	
Smyth, H. K.: Selling Machine Tools in South America	Jan. 132	Steel, Bethlehem Tool	June 166	Switch, Photo-electric Limit	Jan. 189	
Snaps-Lock Limit Switch, National Acme	Oct. 88	Steel, Calcium-chloride Brine for Quenching Carbon	Sept. 26	Switch, Small, Explosion-proof	Aug. 148	
"Snow Cruiser" Wheels were Made, How the	Feb. 132	Steel for Tractor Shoes, Alloy	May 119	Switch with Die-cast Housing, Micro	Feb. 142	
Snowberger, John E., Personal of	Sept. 64-A	Steel Making, New Industrial Film on	May 129	Syncro Machine Co.: Radically New Method of Annealing Wire Reduces Costs and Increases Output	Dec. 272	
Snyder, A. J.: Machining Chrome-nickel-molybdenum Steels of High Tensile Strength	July 208	Steel Making Process, Pluramelt—A New	Mar. 123	Syracuse GuildTool Co.: Portable Electric Sander	May 149	
Society of Automotive Engineers: National Production Meeting to be Held in Hartford	May 127	Steel, New Air-hardening Tool and Die	Mar. 136	T		
Solder Simplifies Soldering and Tinning Operations, Paste	Apr. 170	Steel, New Process for Producing Corrosion-resistant Sheet	Feb. 116	Table, Auxiliary Arbor Press, H. Moore	Sept. 32	
Solderer, "Instant Heat" Electric	Mar. 152	Steel Parts of High Quality, Powdered Metal Produces	Aug. 128	Table of Three-ton Capacity, Adjustable Welding	Dec. 286	
Solutions for Microscopic Examination of Metals, Etching	Jan. 194	Steel Plate, Huge Flywheels Made from	May 131	Taft-Peirce Mfg. Co.: Surface Grinding Machine, Universal Angle-gages, and Demagnetizer for "Superpower" Chucks	Oct. 135	
Somers, Colonel Richard H.: Making the Army's Big Guns at Watervliet	2	Steel Provides Increased Safety for Marking Tools, Alloy	June 145	Careful Analysis of Proposed Products Simplifies Interchangeable Manufacture	Jan. 162	
South Bend Lathe Works: Ten-inch Tool-room Lathe	July 214	Steel Selection and Heat-treatment of	June 136	Taggart, William, Personal of	June 174	
South America, Machine Tool Sales in	Dec. 295	Steel Stitching Machine, Seybold-Morrison	Dec. 281	Tamms Silica Co.: Toolmaker's Lay-out Dope	Aug. 149	
South America, Selling Machine Tools in	H. K. Smyth	Steel Strip, Electric Eye Discovers Pin-holes in	July 193	Tang, B. G.: Taking the Mystery Out of Machine Tool Operation	Oct. 96	
South American Railway Progress	Feb. 101	Steel with High Wear Resistance and Minimum Distortion, Die	June 119	Tangeman, W. H.: Machining and Polishing Flat-iron Castings	Sept. 22	
Southwest Mfg. Co.: Pyralin-tipped Mallets	July 224	Steels for Wear Resistance, Cobalt-chromium-tungsten Alloy	June 157	Tantalum Carbide, see also Tungsten Carbide		
Soviet Machine Tool Imports	Jan. 173	Steels, The Heat-treatment of Tool, Robert C. Deale:	1 Sept. 33	Tantung Brazed- and Welded-tip Tools	June 163	
Spark Plugs to Improve Finish, Broaching	May 89	2 Dec. 257	Tantung-faced Centerless Grinder Blades	Mar. 152		
Sparta Steel with High Wear Resistance and Minimum Distortion	June 137	"Steeltest" Hardness Tester	Dec. 286	Tap-grinder, Hyco	July 215	
Special Small Tools Increase the Cost of Manufacturing	Apr. 158	Steelweld Machinery Division of Cleveland Crane & Engineering Co.: Bending Presses with All-welded Frame	Mar. 147	Tap Developed for Deep-hole Tapping, Geometric	Apr. 169	
Speed Control Maintains Constant Cutting Speed when Facing Disks, Automatic Variable	Francis A. Westbrook	Bending Presses with Bed and Ram Extensions	June 157	Tap-relieving Attachment for Bergram Utility Grinders	Dec. 292	
Speed Control Maintains Constant Cutting Speed when Facing Disks, Automatic Variable	Francis A. Westbrook	Steindorf, R. T., Personal of	Aug. 152	Tap, Rickert-Shafer Collapsible	Oct. 145	
	Mar. 110	Stellite Tools, Grooving Operations Performed with Haynes	Feb. 100			

"Tapgun," Black & Decker	Aug. 147	Tool-room Machine, see also Combination Machine	U	
Tapper, Black & Decker	Aug. 147	Tool	Uhlmann, Max, Obituary of	
Tapper, Building an Improvised High-speed, W. P. Cummins	May 126	Tool Stand, Esco Portable	Mar. 162	
Tapping Machine, Kaufman "Hi-Duty"	June 155	Tool Steel, Bethlehem	Unemployment Actually Technological? Is Industrial	
Tapping Machine, Procumer Air-operated	Oct. 144	Tool Tip Material, New Kennametal	July 200	
Tapping Machines, Addition to Haskins Line of Air-controlled	Oct. 75	Tool to be Pivoted, Holder that Permits	Unemployment is Partly Due to Governmental Mistakes, Present	
Tapping Machines, Bakewell Precision	Dec. 284	Frank Hartley	Unemployment Whys and Wherefore	
Tapered Tubes from Sheet Brass, Dies for Producing, M. J. Goldstein	Dec. 265	Tools are Breaking Production Bottlenecks, Standard	Union Responsibility for Contracts, Leo T.	
Tarbell, Ray P., Personal of	Oct. 160-J	William J. Burger	Parker	
Tate, James, Personal of	Feb. 156	Tools by an Improved Method of Grinding, Increasing the Life of Cutting	Feb. 122	
Tax and Labor Policies Attract Industries to Massachusetts	May 128	Tools, Carbolyt Tantalum and Titanium Carbide	"Unimoni," Welding Machine of Unusual Capacity, Automatic	
Tax Burden of the Railroads	Dec. 296	Sept. 49	Uni-Point Radii Saw	May 105
Tax Collector, Each Westinghouse Employee Works Six Weeks for	July 236	Tools, Unit Machinery Co.:	Unit	
Taxes Continue to Grow? How Long Can	Oct. 160-N	"Polymatic" High-speed Wire-forming and Cutting-off Machine	162	
Taxes, Thirty Cents Out of Every Dollar Earned Goes for	Feb. 106	U. S. Electrical Motors, Inc.:	Aug. 142	
Taxes to the Government for Each Worker Employed, Industry Pays \$576 in	Jan. 150	Oil-lubricated Explosion-proof Motor	June 159	
Taxing the Railroads into Bankruptcy	Aug. 107	Pyramidal-base Motor	July 228	
Taylor, C. M.:		U. S. Tool Company, Inc.:	Automatic Multi-miller for Small Parts	
Unshackle Arc Welding and Speed Progress	Aug. 127	United States Electrical Tool Co.:	Oct. 140	
Taylor, Dr. A. Lloyd, Personal of	Feb. 154	Utility Drill of Streamline Design	Mar. 153	
Tellurium Copper Having Unusual Combination of Properties	Feb. 132	United States, One Hundred and Thirty Years of Manufacturing in the	Mar. 131	
Temperature Recording Equipment, Leeds & Northrup High-speed	Apr. 176	United States Rubber Co.:	The "Ekko" Process for Making Iron Dies	
Tempering Baths, Westinghouse "Corox" Heaters for	Apr. 192	United States Steel Corporation:	Oct. 156	
Templeton, J. B., Personal of	Apr. 196	Use of Man-Ten Steel in Snow Plow Blade		
Templin Testing Machine, Aluminum Research Laboratories Install	Apr. 162	Reduced Weight 1000 Pounds	Feb. 133	
Terry, Willard A., Personal of	Nov. 234-A	New Industrial Film on Steel Making	May 129	
Tester, Knerr-King Portable Brinell Hardness	Sept. 56	Universal-Cyclo Steel Corporation:		
Tester, "Steeltest" Hardness	Dec. 286	Sparta Die Steel with High Wear Resistance and Minimum Distortion	June 137	
Testing Attachments for Dial Test Indicators, B & S	Apr. 187	Universal Engineering Co.:	Collet Chucks Equipped with Release Spring	
Testing Machine, Aluminum Research Laboratories Install Huge	Apr. 162	Universal Joints, Roller Bearing	Sept. 60	
Testing Machine at the World's Fair, Southwark-Tate-Emery	Oct. 160	Upton Electric Salt Bath Furnace	Oct. 142	
Testing Machine for Large Castings and forgings, Hydraulically Operated Brinell	Sept. 53		Jan. 193	
Testing of Materials, Salt-spray	Mar. 128	V		
Thermo-couple, General Electric Radiation Type	Mar. 149	V & O Press Co., Inc.:		
Thermometer and Pressure and Vacuum Gages, Brown	Sept. 58	Inclinable Press with New Features	Oct. 141	
Thomas, Edgar C., Personal of	May 158	Valve for Air Cylinders, Ross All-air Pilot-controlled	Dec. 291	
Thomas Machine Mfg. Co.:		Valve for Welding Equipment, Ross Air	Mar. 150	
Huge Plate Shear	Feb. 104	Valve, Ross Heavy-duty Air-control	Jan. 192	
Thomson-Gibb Electric Welding Co.:		Valve, Stainless-steel Hydraulic	July 216	
Press Welder with Indexing Table	Mar. 147	Van Cleef, William C., Personal of	Sept. 63	
Improved Welding Press	July 214	Van Delft, Arthur, Personal of	Aug. 154	
"Thor Bantam" Portable Pneumatic Grinder	Sept. 60	Van Keuren Co.:		
"Thor-Nado" Portable Electric Hammer	Mar. 153	Optical Parallels for Checking Micrometer Faces		
Thor Portable Electric Nibbler for Cutting Sheet Metal	Feb. 146	Measuring Wires for Internal Gears	Nov. 224	
Thread Chasing Attachments for Brown & Sharpe Automatic Screw Machines	Nov. 219	Van Norman Machine Tool Co.:		
Thread-grinding and Internal Lapping Machines, Ex-Cell-O	Oct. 194	Hand Milling Machine	Sept. 59	
Thread-grinding Attachment, Dumore	Oct. 144	Ram Type Universal Milling Machines	Oct. 112	
Thread-grinding Machine, Jones & Lamson Automatic	Oct. 128	Light Milling Machine	Nov. 216	
Thread-grinding Practice, American, Ralph E. Flanders	1	Vanadium Corporation of America:		
Thread-grinding Practice, European	Sept. 255	Allor Steel Provides Increased Safety for Marketing Tools	June 145	
Thread Tool Gage, Optical	Aug. 146	Vanderwood Co.:		
Threaded Connections; Aero-Thread — A New Method of Making	June 125	Desk-Type Blueprinting Machine	Jan. 191	
Threader, Toledo Self-contained Ratchet Pipe	Aug. 149	VandeVate, Dwight		
Threading and Turning Tools, "Double-Duty"	June 161	Flame-hardening of Gear Teeth	Feb. 123	
Threading Machine and Forging Machine, Acme Roll	Oct. 122	Vari-Drive Drilling Machine, Buffalo	Oct. 125	
Threading Machine, Double-spindle	June 159	Variable Speed, see Speed		
Threading Machine, Eastern Machine Screw Corporation	Oct. 142	Velox Speed Indicator	Mar. 152	
Threading Machine Equipped for Tapping Shells, Landmaco	181	Vennema, A. Whiton, Obituary of	May 160	
Threading Machine for Automobile Steering Pivots, Landmaco	219	Verson Allsteel Press Co.:		
Threading Machine, Kaufman Semi-automatic	Nov. 141	World's Largest Press Brake Used in Fabrication of Barges	Mar. 107	
Threading Machine, Landis Four-spindle Semi-automatic	Oct. 118	Vertex Co.:		
Threading Machine, Rickert-Shafer Motor-driven	Mar. 147	Attachment for Binder that Applies Tape to Edges of Drawings	Sept. 50	
Threading Machine, Stamets Automatic Pipe	May 142	Verti-Hydra-Matic Chucking Machine	Mar. 145	
Threading Machines, Collet Chuck Carriage Front for Landis	Mar. 144	Viali, William A., Obituary of	Dec. 298-A	
Threading Machines, Geometric Precision	Dec. 283	Vibrastat Corporation:		
Threading Rock Bit Steel, Landmaco Equipped for	June 157	Pipe and Tube Connections	Dec. 293	
Threading Tool Grinding Block, William C. Betz	1	Vibration-absorption Properties of Rubber, Oscillograph for Testing	Sept. 55	
"Time Saver" Lathe, Niles	Jan. 169	Vibration Isolator, Johns-Manville Machine	Apr. 186	
Time Study Course	Oct. 122	Vibrometer, Line Starter, and Heavy Limit Switch, Westinghouse	Oct. 110	
Timer and Contactor for Manually Operated Spot-welders, Weld	Apr. 194	Vise, Brown & Sharpe Cam-operated	Jan. 192	
Timer, Cramer Automatic Reset	Apr. 194	Vise for Milling, Drilling, and Grinding Operations, Production	Nov. 225	
Timer for Automatic Spot-welding, Seam Welder Equipped with	July 226	Vise Jaws, "Equi-Hold" Self-adjusting Device for Machine	Apr. 180	
Timing Relay with Cycle Progress Indicator, Reset	May 149	Vise, Larkin Air-operated	Mar. 153	
Timken Roller Bearing Co.:		Vise, Mechanism for Operating a Floating Jaw, L. Kasper	Sept. 19	
New Series Bearings of Standard SS Type	Aug. 139	Vise, Whitney Universal Chain	Oct. 144	
Tinnerholm, Arthur R., Personal of	Feb. 152	Vises for Welding and Production Operations, Simplex	Sept. 59	
Tocco Hardening Adopted for Jacobs Chucks	Nov. 202	Vocation, see also Apprentices, Training, Education School		
Tocco Surface-hardening Machine for Small Parts	Jan. 183	Vocational Course to Train Aircraft Assembly Workers	Sept. 62	
Toledo General Mfg. Co.:		Voss, Otto C., Personal of	May 158	
Demco Sensitive Drilling Machine	Apr. 179	Vultee Aircraft, Inc.:		
Toledo Pipe Threading Machine Co.:		Manufacturing Methods Speed Production of Fighting Planes	July 170	
"Simpact" Self-contained Ratchet Pipe-threader	Aug. 149	W		
"Tom Thumb" Portable Pipe Machine, Oster	Oct. 129	Waikus, Joseph:		
Tool and Die Shop, Ford Operates the World's Largest	Aug. 108	Indexing Fixture for Drilling Angular Holes		
Tool-bit Grinding Machine, Oliver Templet	Oct. 146	Fixture Used on Boring Mill for Cutting Teeth in Large Gear Segments	Sept. 29	
Tool Engineering in the Buick Plant, Ingenious	Apr. 136	Waikus, Vincent:		
Tool Engineering the Basis of Automotive Progress	Apr. 109	Arbor Press with Locking Device for Assembling Operation	Sept. 40	
Tool Grinder, Baldor Improved Carbide	Feb. 144	Experimental Press and Die	June 129	
Tool, H & H Multi-purpose Reciprocating	July 222	Walker Co., Inc., O. S.:		
Tool-holder, Presto Turret Type	Feb. 148	Single-stroke Surface Grinding Machine	Oct. 83	
Tool-room Machine, Hannifin Combination	June 151	Walker Mfg. Co.:		
		Electric Lift for Industrial Plants	Aug. 148	
		Walker-Turner Co., Inc.:		
		Radial Cutting Machine	June 158	
		Wallace, David A.:		
		Future Trends in Equipment for Surface Finishing	Oct. 120	
		Wallace Supplies Mfg. Co.:		
		Hydraulic Ram Type Pipe-bending Machine	216	
		Walters, E.:		
		Welded Tubular Frame Solves Heavy Machine Construction Problem	Jan. 170	
		Waltham Machine Works:		
		Pinion and Gear Cutting Machine	Oct. 138	
		Ward, Jr., J. Carlton:		
		Maching Tools in the Aircraft Engine Industry	Oct. 72	

Warner & Swasey Co.:	
Ball and Roller Bearings Used in a Turret Lathe	Sept. 16
Turret Lathe for Brass Work and Preselector	Oct. 111
Lathe Beds Designed for Maximum Strength and Rigidity	Nov. 170
Ram Type Turret Lathe	Dec. 280
Unusual Model of Turret Lathe	Jan. 196
Standard Tools are Breaking Production Bottlenecks	Feb. 110
Saddle Type Turret Lathe	Feb. 137
Educational Program for Machine Operators	June 141
A Coordinated Training Program that Has Produced Results	Aug. 93
Washabaugh, S. M., Personal of	Aug. 156
Washers Clean Engine Castings, How New Ply-mouth	Apr. 142
Waterman, E.:	
Mandrel Thrust Collar Designed for Length-wise Adjustment	Aug. 112
Waterproofing and Crack-filling Material for Floors, Tred-Seal—A New	Aug. 128
Watertown Arsenal, Manufacturing Preparedness at: Colonel Rolland W. Case	Mar. 2
Waterlist, Making the Army's Big Guns at: Colonel Richard H. Somers	Feb. 97
Watson-Stillman Co.:	
Giant Hydraulic Flanging Press	Feb. 142
Hydraulic Compression and Injection Molding Machines	Apr. 179
New Plastics Press	July 228
Watson, William:	
A Machine Tool User's Tribute to the Machine Tool Builder	Oct. 152
Wayne Chemical Products Co.:	
Metallomatic Paste Solder Simplifies Soldering and Tinning Operations	Apr. 170
Weaver, J. R.:	
How Can We Reduce Idle Machine Time?	Oct. 114
Webster, Charles E., Personal of	Oct. 160-J
Weighing Device that Indicates Amount of Stock to be Milled Off, Work-holding Fixture with	Mar. 154
Weight and Center of Gravity, Correcting Automobile Connecting-rods for	June 168
Weisenbach, Jefferson Carl, Obituary of	Mar. 162
Weld Recorder, General Electric	Jan. 192
Weld Timer and Contactor for Manually Operated Spot-welders	Nov. 215
Welds, General Electric Gage for Checking Fillet	Mar. 153
Welds, Long Experience Not Required in Making Reliable	June 168
Welded Construction in Press Design, Cast Frame Versus—A Comment, A. E. Gibson	Mar. 130
Welded Fittings, Developments in	Aug. 99
Welded Flange Joint of Unique Design, George B. Crump	Nov. 188
Welded Press Construction, Cast Versus I. Patrick	May 95
Welded to Cast Frame Construction in Press Design, Changing from, E. V. Crane	Jan. 159
Welded, Tubular Frame Solves Heavy Machine Construction Problem, E. Walters	Jan. 170
Welder, Allis-Chalmers Low-current Electronic Arc	Nov. 232
Welder, Bear Alternating-current "Arcmaster"	July 226
Welder, Comet Portable Heavy-duty Arc	May 147
Welder Equipped with Timer for Automatic Spot-welding, Seam	Dec. 298-F
Welder, Hampton Alternating-current	Nov. 230
Welder, Lee Duplex	Apr. 185
Welder, Lincoln Arc	Jan. 183
Welder, Lincoln Junior 200-ampere Arc	Nov. 220
Welder, "Progress-O-Matic" High-speed Spot	Aug. 138
Welder, Westinghouse "Flex-Arc"	Aug. 146
Welder, Wilson "Hornet" Electric Arc	Nov. 228
Welder, Wilson Remote Control for Arc	May 148
Welder with Indexing Table, Thomson Press	Mar. 147
Welders, Alternating-current Arc	Oct. 143
Welders Connected in Parallel for Increased Capacity	Sept. 54
Welders Equipped with Remote Control, Sterling	Sept. 54
Welders, Ergolyte Arc	Aug. 147
Welders, K. O. Lee Arc	Mar. 146
Welders, Miller Alternating-current	Sept. 55
Welders of Standardized Design, Spot	Aug. 135
Welders Recently Announced by the Lincoln Electric Co., Arc	Oct. 145
Welding a Difficult Process? Is Arc	May 92
Welding and Cutting Equipment of Improved Design, Prest-O-Weld	Nov. 212
Welding and Die-casting; Protect-O-Metal, a Compound for Use in	Dec. 274
Welding and Speed Progress, Unshackle Arc, C. M. Taylor	Aug. 127
Welding Blowpipe and Cutting Attachment	Apr. 184
Welding, Building up Broken Gear Teeth by Bronze	May 128
Welding Cable, "No-Kink"	Apr. 180
Welding Courses, John Huntington Institute to Continue	Nov. 193
Welding Electrode, Rod, see Electrode, Rod	
Welding Equipment for Assembling Automobile Garnish Molding, Spot	Mar. 149
Welding Equipment, Ross Air Valve for	Mar. 150
Welding Fixture for Production Work, Projection, H. B. Faught	Mar. 111
Welding Gun Equipped with Extension Handle, Spot	Nov. 220
Welding Gun, Hydraulic Cable Clamp for Spot-	May 144
Welding Liquid, Paste, and Rod; Colaweld Atomic	
Welding Machine, Eisler Universal Spot	May 131
Welding Machine, Federal Automatic Hoop Forming and	June 156
Welding Machine of Unusual Capacity	May 105
Welding Machines in Parallel, Running Electric	Jan. 176
Welding Machines, Pier Spot	Dec. 288
Welding Materials for Use at Low Temperatures, Oxy-acetylene	June 144
Welding Nuts, Bosses, and Brackets	July 219
Welding Often Requires Redesign of Parts, Fabrication by Arc	Feb. 102
Welding Operations, "Protect-O-Metal" for Preventing Spatter in Electric	June 160
Welding Operators, Skill of Arc, W. J. Chaffee	Aug. 121
Welding Oxweld Blowpipe Designed for Light	Feb. 147
Welding Press, Thomson	July 214
Welding Prize Contest, Resistance	May 150
Welding Saves Time, Fabricating by	Feb. 129
Welding Sets, General Electric Multiple-operator	Jan. 190
Welding Stainless-clad Steel, New Method of	Oct. 160-F
Welding Table of Three-ton Capacity, Adjustable	Dec. 286
Welding Tips, New Copper-Iron Alloy for Spot	June 145
Welding Vises, Simplex	Sept. 59
Welding, "Wonder Weld" Heat-resisting Compound for Use in	Sept. 61
"Wedor" is Proposed as Name for Men Who Weld	Sept. 40
Weld-O-Tron Low-current Electronic Arc Welder	Nov. 232
Wellauer, Edward J.:	
Gear Materials and Their Heat-treatment	Mar. 103
Wellman Engineering Co.:	
Cast Frame Versus Welded Construction in Press Design—A Comment	Mar. 130
Wells, Walter:	
Blanking Die with Push-through Punch for Experimental and Semi-production Work	Nov. 191
Universal Self-aligning Two-hole Piercing Die	Mar. 113
Weltronic Corporation:	
Weld Timer and Contactor for Manually Operated Spot-welders	Nov. 215
Seam Welder Equipped with Timer for Automatic Spot-welding	Dec. 298-F
Wentzell, Horace R.:	
Dies for Producing Radiator Inlet Pipe with Angular Flange	Feb. 119
Wesson Co.:	
Standard Carbide-tipped Tools	Apr. 164
Westbrook, Francis A.:	
Automatic Variable-speed Control Maintains Constant Cutting Speed When Facing Disks	Mar. 110
Western Mfg. Co.:	
Machine Tool Transmissions	Mar. 151
Westinghouse Electric & Mfg. Co.:	
Telling Employees How Money is Spent	Sept. 8
Dynamic Balancing Machine for Measuring Unbalance of Rotors Quickly	Sept. 17
Line Starter, Heavy Limit Switch, and Vibrometer	Oct. 110
Semi-industrial Motion Picture	Nov. 168
Flame-hardening Large Carbon-steel Spindle	Nov. 176
Electric Eye Inspects Thin Sheet Metal for Defects	Nov. 177
Turning a Large Water-wheel Generator Shaft	Nov. 184
Heat-treated Gears for Industrial Use	Nov. 214
Electric Furnace for Hardening Tool Steels	Nov. 216
Speed Increases	Dec. 293
Exhibit at the 1940 World's Fair	Feb. 141
Type QR Photo-Troller Relay	May 103
Boring and Facing Large Marine Reduction Gear Houses	Mar. 106
Materials Artificially Aged by Salt Spray	Mar. 128
"Corox" Heaters for Tempering Baths	Apr. 192
Machine Tool Electrification Forum	May 88
Universal Stock Support for Punch Presses	May 120
Building an Improvised High-speed Tapper	May 126
Fifty-eight Inch Fluorescent Lamp	May 139
Order of Merit Conferred on Thirty-nine Employees	May 149
Selecting the Best Material for a Given Application	June 113
Sparta Die Steel with High Wear Resistance and Minimum Distortion	June 137
Machine Tool Electrification Forum	June 140
Cuferco Copper-Iron Alloy for Spot-welding Tips	June 145
Awards for Long Service Made to Employees	June 168
Electric Eye Discovers Pin-holes in Steel Strip	July 193
Two Giant Half-cylinders for Stator of Huge Water-wheel Generator	Aug. 100
"Flex-Arc" Welder	Aug. 146
Wheel-dresser for Contour Grinder, Stanley Diamond	Dec. 294
Wheel-dressing Tool, Diamond	Aug. 142
Wheel-puller, Shop-fabricated	K. N. Bantin Feb. 121
Wheel-Shank Support, Dumore Mounted	Mar. 148
Wheel-truing Device for Surface Grinding Machines	J. R. Whittles Feb. 117
Wheels, Atlantic Grinding	May 147
Wheels, Manhattan Rubber Bushing for Grinding	Nov. 232
Wheels Now Being Used on Trucks and Buses, Aluminum	May 131
Wheels, Simplified Practice Recommendation on Grinding	Oct. 160-O
Wheels were Made, How the "Snow Cruiser"	Feb. 132
Wheelabrator "Tumblast-Tablast" Metal-cleaning Equipment, Combination	Aug. 136
Wheelco Instruments Co.:	
Preventing Overloading of Press Motor by Suitable Control	Sept. 21
Surface Temperature Pyrometer	Dec. 292
Whipp, Wendell E.:	
Social Benefits Derived from Machine Tools	Oct. 66
Whistler & Sons, Inc., S. B.:	
Universal Perforating Dies	Sept. 60
White, Charles Arthur, Obituary of	Apr. 202
White, Dr. W. M., Personal of	Mar. 160
White, S. M.:	
Fixture for Holding Carbide Tools while Brazing	May 117
Whiteprint Machine, Ozalid Automatic	Apr. 176
Whitney Chain & Mfg. Co.:	
Universal Chain Vise	Oct. 144
Whittles, J. R.:	
Wheel-truing Device for Surface Grinding Machines	Feb. 117
Chuck for Triple Gear	May 116
Fixture for Grinding Eccentric	June 129
Wieco Machine Corporation:	
Heavy-duty Oil-grooving Machine	Mar. 144
Wicker Bros.:	
Hydraulically Operated Crankshaft Lathe with Center Drive	Dec. 288
Wiedemann Machine Co.:	
Motor-driven Turret Punch	May 136
Wilhelm, Joseph, Obituary of	Dec. 298-A
Willard Mfg. Co.:	
Milling Head for Lathes	Apr. 181
Williams, Sidney D., Personal of	Mar. 158
Williams White & Co.:	
Beam Punch and Spacing Table	Nov. 219
Wilson, Charles E., Personal of	Dec. 297
Wilson, Earle B.:	
Arbor Press Broaching Fixture	Jan. 166
Wilson, Eugene Edward, Personal of	June 169
Wilson, George:	
Three-stage Piercing and Forming Die	Aug. 113
Wilson & Metals Co., Inc.:	
"Horset" Electric Arc Welder	Nov. 228
Welded Tubular Frame Solves Heavy Machine Construction Problem	Jan. 170
Remote Control for Arc Welder	May 148
Winder Drive, Ideal Coil	Feb. 145
Winding Strip Metal, Lewellen Variable-speed Transmission for	Feb. 145
Wire Cutting and Forming Tools for the Shaper, Arthur Owen	Sept. 32
Wire-forming and Cutting-off Machine, "Polymatic" High-speed	Aug. 142
Wire Insulation Stripper with Vacuum Collector	Jan. 191
Wire Reduces Costs and Increases Output, Radically New Method of Annealing	Dec. 272
Wire Reed, Moslo "Shiftwise"	Feb. 146
Wire with Surface Impregnated by Dry Lubricant	Aug. 129
Wires for Internal Gears, Measuring	June 157
" Wonder Weld" Heat-resisting Compound	Sept. 61
Wood-turning Lathes, Multi-speed	Nov. 222
Worcester Pressed Steel Co.:	
The Industrial Museum	Sept. 14
Work, Dr. Lincoln T., Personal of	Aug. 154
Wrench, Armstrong Miniature Reversible	Feb. 147
Wrench for Rapid Assembling, Power-operated Magazine Socket	May 116
Wrenches, Durco Tension-measuring	June 159
Wrenches, Reversible Pneumatic	Apr. 192
Wright Aeronautical Corporation:	
"Wright Aero" Plans for Unprecedented Production	July 134
Wright, Inc., L. G.:	
"Wrigraph" Drafting Machine	Nov. 223
"Wrigraph" Adjustable Ball-bearing Drafting Machine	Aug. 149
"Wrigraph" Drafting Machine	Nov. 223
"Wrigraph" Industr Drafter	Aug. 149
Writer at His Best Uses Few and Simple Words, The Technical	Mar. 108
Wunder, Van S., Obituary of	Sept. 64-A
Wyman, R. W.:	
Simply Constructed Electric Heating Bath	Apr. 157
Y	
Yates, Robert N., Personal of	Sept. 63
Yeager, H. H., Personal of	Mar. 155
Yellott, John L., Personal of	Feb. 152
Yeoman, I. F.:	
Cutting-off Tool for Use with a Hexagon Turret	Jan. 165
Yerkes, Richard W., Personal of	Nov. 234
Young, Orville W.:	
Making the Special Machine Tool Less Special	Oct. 102
Z	
Zeamer, A. C.:	
Spring Pin for Holding Scrap Stock in Screw Machine Collet	Dec. 262
Zeh & Hahnenmann Co.:	
Double-crank Presses	Feb. 140
Zeiss, Inc., Carl:	
Measuring Microscope and Gear Orthotest	Oct. 142
Zerkle, Paul F., Personal of	Sept. 64-A
Zima, A. G., Personal of	Nov. 234-A

